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Increased Railway Freights

THE surprising feature of the decision earlier this week to apply forthwith the flat 10 per cent. increase in railway freight, parcels, dock and canal rates is the promptness of the decision taken by the Minister of Transport, Mr. Alfred Barnes, and by the permanent members of the Transport Tribunal whose advice he followed. The text of their memorandum to the Minister is given elsewhere in this issue. The decision not to hold a public hearing is also surprising, and to some extent perhaps a reassuring sign of vigour; a hearing probably would have done no more than clear the air and would also have unduly postponed urgently needed action. In any case, the new increases are interim only, pending operation of a road-and-rail freight charges scheme—though the Transport Tribunal members predict the operation of this in 1954 at the earliest. The interim increases are expected to bring in a further £20,000,000 in a full year, making allowances (an important factor in the case of merchandise and parcels traffics, together over one-third of total railway receipts) for traffic lost to the roads; this, however, with the profits on other British Transport Commission activities, can at the best result only in reduction of the Commission's accumulated deficit to some £50,000,000. Regarding the freight charges scheme, which would appear to be the only long-term solution (and even then problematical) of the question, the Tribunal members are cautious—as well they may be, in view of the disappointment they express at the prospective inability of the Commission's own road haulage services to yield more revenue, and of the fact that one-half of B.T.C. revenue is from railway freight. There are many critics of this forthright action to alleviate the B.T.C. financial situation, and its consequences for trade and industry will be considerable; no feasible short-term alternative has been suggested for freight traffic. Regarding increases in passenger fares, which Mr. Barnes' advisers last week did not consider it timely to discuss, as a passenger charges scheme was "about to be lodged," it has just been announced that such a scheme has been lodged with the Transport Tribunal by the Railway and London Transport Executives. It is to be hoped that the promptitude displayed in the initiation of this scheme will be maintained.

The Budget

THE increase in the petrol and fuel oil tax announced on Tuesday by the Chancellor of the Exchequer is the main budget feature which will affect the British Transport Commission. The railways will be put to increased expenditure on petrol and oil, estimated at some £225,000 a year. London Transport will have to pay some £630,000 more annually for its petrol and oil, and the provincial and Scottish bus undertakings will be correspondingly affected. In addition, the higher cost of petrol will doubtless drive some merchandise, parcels, and passenger traffic—the last very slightly augmented by the increased purchase tax on motor cars—back to the railway. It would be too much to suggest that this was an express intention of the budget, but the road haulage industry is accusing the Government of bolstering up nationalised transport in this way. The increase in income tax may indirectly affect holiday travel by rail, and have some slight effect on receipts from carriage of consumer goods. The increase from 30 to 50 per cent. in distributed profits tax cannot fail to affect industry in general. The increase in purchase tax is linked with the railway freight rate increase to which we refer above, for the latter must increase the price of consumer goods.

Mr. Elliot Talks to Traders

THE annual luncheon of the Mansion House Association on Transport always attracts a very large attendance, partly because of the age and influence possessed by the Association, but also because it has achieved a reputation for the high quality of the speakers it attracts on these occasions. Last Friday's function was noteworthy because it had the largest attendance so far and for a forthright address delivered by Mr. John Elliot, the Chairman of the Railway Executive. A summary of this speech is given elsewhere in this issue, and some of the basic considerations which he must have had in mind when he delivered it are the subject of further editorial reference. Here it is sufficient to say that, although delivered in the buoyant, entertaining and often humorous style which is characteristic of Mr. Elliot, it was quite evident that a great deal of thought must have been given to the matters dealt with so as to compress into a relatively short speech so many considerations important to industrial users of transport. Nothing but good can come of a forthright discussion with traders of some of the difficulties which face railways at the present time. Mr. Elliot's willingness to open discussions as to how improvements in services could be secured next winter and his point that both parties could assist to this end were recognised as a realistic approach to a mutual problem.

Rolling Stock Repair Improvements

OVER the last three years there has been a steady improvement in the percentages of locomotives, wagons and coaches out at service and awaiting repair. At the end of 1938 the figure relating to locomotives was 18·3 per cent. and at the end of 1948 it was 17·1 per cent. The

similar 1949 figure had fallen to 16·9 per cent. and at the end of last December it was again smaller at 16·2 per cent. There is a natural tendency to avoid having vehicles out at service at the time when the census is taken, but as, presumably, that is a constant factor, the results are encouraging. To a considerable extent, the efficiency of locomotive maintenance can be judged by the average distance run between casualties, and it is interesting that since April, 1949, when a standard system of classifying and recording casualties was introduced, the average distance run between shopping for these causes has risen by 50 per cent. Wagons out of service for repair have fallen from 9·8 per cent. in 1948 to 6·7 per cent. in 1950, after having been 8·4 per cent. in 1949. Similar statistics for passenger carriages are 9·4 for 1948, 8·2 for 1949 and 8·7 for last year. Comparable figures for wagons and passenger carriages were not available in respect of 1938.

Increased Postal Charges

THE announcement last week by the Postmaster-General that charges for various postal services are to be increased to bring in over £6,000,000 additional revenue, included an admission by implication that the overall Post Office surplus is expected to be, as usual, considerable. The fact incidentally that an institution such as the Post Office which performs functions allied to transport, with which it is necessarily closely connected, always makes a profit is remarkable. As regards British Railways, the increased rates for overseas parcels (in so far as these are now conveyed by rail) may slightly increase their revenue, for it appears that for carriage of parcels the railways receive a percentage of Post Office parcels receipts. This advantage, however, may well be offset by the increases in other postal charges, such as the inland printed paper rate, which will weigh heavily on the railways as on other business undertakings. Given the present unsatisfactory system of free postal services to other Government Departments, the excuse that separate Post Office services must pay their way is a lame one. It seems that Treasury insistence on the Post Office as a constant source of revenue has over-ridden any consideration of the wisdom of increasing charges in defiance of the principles which the Government itself has laid down.

L.M.R. Regional Staff Conference

ALTHOUGH conferences attended by staff officers are no modern innovation—some were held on the old Southern Railway soon after amalgamation—they did not become a regular feature of contact between management and staff until after nationalisation. Regional staff conferences were started by Mr. John Elliot, the present Chairman of the Railway Executive, when he was C.R.O. of the Southern Region. Now they are held in most of the Regions. Last Monday, Mr. J. W. Watkins, Chief Regional Officer of the London Midland Region, held his first staff conference in London since he assumed office. The meeting was well attended and was marked by very practical questions from the staff. Mr. Watkins, in our view rightly, emphasised at the outset that all the questions raised must be of Regional interest and should not impinge on affairs for which machinery for discussion already existed, and the stipulation was loyally adhered to by the staff. The Chief Regional Officer was also at pains to ensure that every question raised was dealt with methodically and in detail by the officers concerned. The impression gained of the conference was that the time of those attending was well spent and that useful information had been gained on both sides of the table.

Education of Cartage and Terminal Supervisors

THE success of the former L.N.E.R. experimental course for cartage supervisors described in our November 14, 1947, issue, led the Railway Executive on nationalisation to provide an inter-Regional course of a similar kind at the Hadley Wood Staff College in 1948. Since then both Regional and inter-Regional courses have been held and extended to cover terminal as well as cartage supervisors in separate or joint courses. This year a new technique is being tried. Instead of each Region running its own course, or of a series of inter-Regional courses run by one group of instructors, a series of five courses has been arranged, each run by a separate Region, though held at Woking and attended by supervisors from all Regions. This provides instructional opportunities for a larger number of well-informed instructors and enables Regional points of view and practices to be discussed. Whilst formal discussions on a set topic are valuable, the less formal discussions that continue after official hours are of even greater value. The supervisors take back with them to their depots a keener appreciation of management aims, of the ways in which they can be achieved, and of the contribution which they are able to make towards the achievement; and the polishing of brains and pooling of knowledge are of great value.

Palletisation

THE advantages of the pallet system of handling and stacking railway freight were referred to by Mr. David Blee, Member of the Railway Executive, in a paper on freight handling, of which an abstract was given in our issue of July 30, 1948. The system since then has been the object of constant study by the Railway and Road Haulage Executives, equipment manufacturers, traders, the Ministry of Supply, and the fighting services (in which last palletisation is practised with some success for certain internal depot purposes). Details of recent further tests are given elsewhere in this issue. These demonstrated the possibilities of varying types of equipment for loading and unloading road and railway vehicles, and achieving high speeds of work whilst taking advantage of the full capacity of vehicles by tiering loaded pallets one above the other. It was not claimed that the vehicles, having been loaded in this manner, would always have carried the traffic safely to destination; glue-bonding between packages, use of metal straps, or packing between pallet loads, might be necessary to ensure safe transit. These are the subject of experiment and investigation, as is the crucial question of the standardisation of package and pallet dimensions.

Irish "Enterprise" Expresses

IT is unfortunate that a coal shortage should cause the temporary suspension, as stated in our issue of March 30, of the through working of the "Enterprise" Belfast-Dublin express to and from Cork. As is shown elsewhere in this issue, this service, which was inaugurated by the Great Northern Railway (Ireland) between Belfast and Dublin in August, 1947, was duplicated several years later, and extended over Coras Iompair Eireann metals to and from Cork in October, 1950, possesses some interesting features. As the first regular through service between Belfast and Cork it has valuable possibilities for transatlantic passengers to Scotland by liners which call at Cobh. It provides a direct route *via* Belfast that might save the passenger a day as compared with that proceeding to Plymouth or Southampton and thence to Scotland. Transatlantic air travellers landing at Shannon Airport also can make a quick journey to Dublin, Belfast, and Scotland by catching the "Enterprise" at Limerick Junction. The duplicate "Enterprise," worked by the G.N.R.(I.) with a diesel buffet car set which sets a high standard of comfort, leaves Dublin for Belfast at 11 a.m., and returns at 4.45 p.m.; during the coal shortage this might provide a useful substitute for the through Belfast-Cork steam working with an early morning start from Cork.

New Ships for Newcastle-Oslo Line

ON April 4 a dinner was held in the m.s. *Blenheim*, at the Tyne Commission Quay, North Shields, to celebrate the maiden voyage of the vessel. The hull of the ship was built by John I. Thorneycroft & Co. Ltd., Southampton, where it was launched last August. It is owned by

the Fred Olsen Line of Oslo, which, in the operation of the Newcastle-Oslo route, works in close co-operation with the Norwegian State Railways on the one hand, and with British Railways on the other. The engines and fittings were installed in Norway, and the accommodation provided for 236 passengers is spacious, comfortable, and of most modern design. A number of well-known Norwegian artists carried out various parts of the interior decoration, and a most pleasing effect has been achieved. Passengers are accommodated on five decks. The Norwegian Ambassador, speaking at the dinner, expressed the hope that the excellent outcome of this co-operation between English and Norwegian shipbuilders would result in a much increased flow of traffic between the two countries. The *Blenheim* will supplement the service at present being provided on the Newcastle-Oslo route by the *Bretagne*.

Standard Station Signboards

TWO years ago, the Railway Executive decided to provide standard direction signs on British Railways stations, and a series of signs was designed to cover every title then in use. Lettering is of the Gill Sans type on a background of the Regional colour, and all signs consist of vitreous enamel plates of standard sizes which allow ample area of background and give a high degree of clarity to the lettering. Signboards are being provided gradually as stations undergo periodic renovation, and the first London terminus to complete the transformation is St. Pancras L.M.R. Results have already brought favourable comments from users of the station, and the illustrations accompanying an article in other pages this week show some examples of past and present layout, the latter being a considerable improvement on the somewhat untidy and haphazard arrangement which existed before the introduction of the new scheme. The treatment of the display in the concourse was carried out in two stages, first the area behind the buffer stops, which was quite simple, then the main wall, which was covered with a profusion of irregularly placed signs, traffic advertising boards, and commercial displays of all shapes and sizes. The main frontage to St. Pancras now has a Neon sign.

British Railway Traffics

DESPITE the many difficulties which beset British Railways, the amount of work done by them, which is best measured either in passenger-miles or freight net ton-miles, still shows a very considerable increase over pre-war. When Mr. John Elliot, Chairman of the Railway Executive, was addressing members of the Mansion House Association on Transport last week, he pointed out that the number of passengers conveyed by British Railways is greater than that by the whole of the Class I and II railways in the United States. In 1948, for example, British Railways carried 996,000,000 passengers as against 643,000,000 in the U.S.A. In 1949 the discrepancy was even more marked, for whereas the British figure was 993,000,000, that of the United States had declined to 554,000,000. Figures for this country exclude travel on the railways of London Transport, which carried 641,000,000 in 1949. Equally, comparison with the United States railways does not reflect the difference in the average length of passenger-journey, which is very much greater in that country. The volume of passenger traffic on British Railways in recent years has been:—

	Passenger-journeys Millions	Passenger-miles Millions
1938	1,206	19,702
1948	996	21,259
1949	993	21,138
1950	982	—

The passenger-miles are greater than in any year between the wars, and it is almost certain that when the 1950 statistics are available this will still be so. It will be seen that the number of passenger-journeys is less, and the combined effect of the decrease in journeys and the increase in passenger-miles is to raise the average distance travelled per passenger from 15·94 miles in 1938 to 21·29 miles in 1949.

Of railway passenger fares, it may be said that they are now 55 per cent. over the pre-war level, but the whole of the cheap fare facilities available in 1938 have not yet been re-introduced. The true increase in the level of fares is not available, but it is probably in the region of 75 per cent. On this basis it is clear that railway travel is very far from being among the factors in the average budget which have shown the largest increases as compared with pre-war. There can be no doubt, either, that whether or not on other grounds it is deemed desirable, an increase in passenger fares would still yield a considerable revenue to the railways.

Railway spokesmen before the members of the Transport Tribunal have mentioned their unwillingness to advocate a further substantial flat increase in fares, partly, no doubt, because of the susceptibility of this class of traffic to competing forms of transport. Nevertheless, with the increasing need of the railways for additional revenue to meet their commitments, there can be no doubt that the position of the passenger has been reviewed. Moreover, if, as seems likely, we are now moving towards a much higher general price level, there can be no grounds for supposing that railway passenger fares will be an exception to the general trend.

On the freight side of railway operations there has been an increase in the tonnage carried as compared with pre-war, and a considerably greater increase in the figure of net ton-miles. The combined effect has been to raise the average length of haul from 58·5 miles in 1938 to 74·3 miles in 1950. The general position is shown below:—

	Freight tons (including livestock but excluding free-hauled traffic) Millions	Freight net ton-miles (including livestock & free-hauled traffic) Millions
1938	266·5	16,672
1948	273·2	21,502
1949	280·2	22,010
1950	281·3	22,135

The figure of freight net ton-miles for 1938 refers to all standard-gauge railways and not only those now incorporated in British Railways, but the difference involved is not considerable.

Railway freight charges, including those for parcels, are approximately 81 per cent. above the pre-war level. They therefore show a very much smaller increase than the general level of prices. In the case of many of the maintenance materials required by the railways, the rise in price has been anything from 100 to over 400 per cent., as will be seen from the following list:—

Maintenance materials (August, 1939 = 100)	Price index at December, 1950
Steel rails	216
Pig iron	213
Iron bars	221
Steel bars	212
Cast chairs	202
Steel plates	207
Steel billets	200
Steel tubes	203
Copper plates	316
Copper tubes	278
Brass bars	520
Tin block	523
Timber : sleepers	416
Timber : general	349
Oils	303

Some of these prices have increased further since the end of last year, but it is very clear that in all the above cases the advance which has taken place in railway freight charges is considerably less than the prices which the railways have to pay for many similar products which are required for their own use. In the case of many other materials required by the railways there have also been very large increases in prices, ranging up to 300 per cent. The price index of coal, based on 1938 equal to 100, was 280 at the end of 1950. Taking into account salaries and wages and materials and basing them on 1938, the following result is obtained:—

	Salaries & wages	Materials	Total
1938	100	100	100
1949	204	233	215
1950	204	242	219
1951 (estimated) ...	220	259	235

XUM

It would seem to be obvious that, other things being equal, it is not possible, except in a state of increasing insolvency, to operate railways on the basis of a rise in labour and materials costs of 135 per cent. as compared with an increase in passenger fares of 75 per cent. and of freight charges of 81 per cent. It was this point which we had in mind when, in an editorial note in our March 16 issue, we referred to the fact that British Railways subsidised industry by uneconomic rates for freight traffics, including coal and minerals, which together make up 25 per cent. of the British Transport Commission's receipts. This comment of ours has aroused some correspondence, and two further letters are published elsewhere in this issue. In one of them it is suggested that the level of prices of coal and iron and steel " have nothing whatever to do with the profitability or otherwise of railway charges," which will be encouraging to some railwaymen, especially those responsible for purchases. It is, perhaps, analogous to saying that the level of rent, food and clothing has nothing to do with the adequacy of wage rates! Even with the addition of 10 per cent. to freight charges which has just been authorised, there will still be a discrepancy between railway charges and the general level of prices.

British Transport Commission Traffic Receipts

THE notable feature of the receipts for the third statistical period of this year of the main sources (less the second largest item, road haulage) of British Transport Commission revenue is the decline, against 1950, of parcels, merchandise, and minerals receipts; the increases respectively of 12, 9, and 7 per cent. in these must be considered in relation to the 16⅔ per cent. rise in rates last May; and the same is true also of the seemingly large increase, of 19 per cent., over last year in coal and coke receipts. Whilst the reasons for the drop in merchandise and parcels traffics are not far to seek (the chief cause being road competition) there seems to be no reason, pending publication of detailed statistics in a month's time, for the decline in mineral receipts. For Period 2, these yielded receipts 16⅔ per cent. over those for the corresponding period of 1950; it seems unlikely that the Easter holiday had any effect, and coal and coke receipts maintained the improvement shown in the preceding period.

—	Four weeks to March 25		Incr. or decr.	Aggregate for twelve weeks		Incr. or decr.
	1951	1950		1951	1950	
	£000	£000		£000	£000	
British Railways—						
Passengers	7,400	6,716	+ 684	18,932	18,869	+ 63
Parcels, etc., by passenger train	2,464	2,196	+ 268	7,112	6,382	+ 730
Merchandise & livestock	7,316	6,694	+ 622	21,432	19,383	+ 2,049
Minerals	2,603	2,434	+ 169	7,869	7,109	+ 760
Coal & coke	6,804	5,707	+ 1,097	20,012	16,809	+ 3,203
	26,587	23,747	+ 2,840	75,357	68,552	+ 6,805
Road Passenger Transport: Provincial & Scottish—						
Buses, coaches & trolleybuses	2,846	2,516	+ 330	8,080	7,313	+ 767
London Transport—						
Railways	1,211	1,117	+ 94	3,599	3,332	+ 267
Buses & coaches ...	2,416	2,351	+ 65	7,011	6,837	+ 174
Trolleybuses & trams ...	740	823	− 83	2,209	2,425	− 216
	4,367	4,291	+ 76	12,819	12,594	+ 225
Inland Waterways—						
Tolls	68	53	+ 15	184	153	+ 31
Freight charges, etc. ...	67	63	+ 4	184	191	− 7
	135	116	+ 19	368	344	+ 24
Total	33,935	30,670	+ 3,265	96,624	88,803	+ 7,821

The increase over last year, of 10 per cent., in passenger takings presumably is due to the incidence of Easter, which allowed of long-distance holiday bookings during this period. This is borne out by the decrease of 3 per cent. over 1950 in passenger receipts for the previous period; in addition, the coal-economy restrictions in passenger train services obtaining during the previous period (and the first three-quarters of Period 3) would also account for this, and (very largely) also for the fact that this was the first time since July, 1949, that passenger receipts for any period showed an increase compared with a year earlier.

London Transport receipts, which showed an increase of under 2 per cent. over last year, were much as for the preceding period. Whilst the effects of the London Charges Scheme must be borne in mind, the incidence of Easter (though a cold and wet one) seems to have had no effect.

There was little change, compared with the preceding period, in B.T.C. road passenger (provincial and Scottish) or in inland waterways receipts. For the four of the Commission's activities normally included in these statistics the total receipts were 10·6 per cent. over Period 3 of last year, largely as the result of increased railway passenger and coal traffic receipts.

PERCENTAGE VARIATION 1951 COMPARED WITH 1950

	4 weeks to March 25	12 weeks to March 25
British Railways—		
Passengers	+ 10·1	+ 0·3
Parcels	+ 12·2	+ 11·4
Merchandise & livestock	+ 9·2	+ 10·5
Minerals	+ 6·9	+ 10·6
Coal & coke	+ 19·2	+ 19·0
Total	+ 11·9	+ 9·9
Road Passenger Transport	+ 13·1	+ 10·4
London Transport—		
Railways	+ 8·4	+ 8·0
Buses & coaches	+ 2·7	+ 2·5
Trolleybuses & trams	− 10·0	− 8·9
Total	+ 1·7	+ 1·7
Inland Waterways	+ 16·3	+ 6·9
Aggregate	+ 10·6	+ 8·8

Electrification Trends Overseas

IN preparing its recent report on Electrification of Railways, the committee appointed by the Railway and London Transport Executives collected data from several overseas countries and paid visits to Italy and Germany. Considering the committee's general recommendation in favour of 1,500 V. d.c. for further electrification in this country (for reasons given in our March 23 issue), it is of interest that a marked trend towards d.c. at 3,000 V. is discerned abroad. Out of ten countries mentioned in the report as already using direct current or contemplating doing so, eight have chosen a 3,000-V. system. One exception is France, where 1,500 V. was standardised after the 1914-1918 war, and has been applied on a scale which was considered to make conversion to 3,000 V. impracticable when the question was reviewed again after 1945. Certain economic advantages were recognised in the 3,000-V. system, but it was felt that these would have been outweighed by operating difficulties of inter-running with 1,500-V. d.c. lines.

Technically, inter-running is simplified when one of the voltages concerned is twice the other, but whether it is economic or not to make provision for working of this kind depends on the number of locomotives needing to be equipped specially for it. In France two important main lines from Paris to the South were already electrified at 1,500 V., and eventually the present Paris-Lyons scheme, when extended southward, will be connected with both by the 1,500-V. line from Nimes to Toulouse and Dax. East of Lyons there is the 1,500-V. electrification from Culoz to Modane, eventually to be linked with Lyons and Macon. If 3,000 V. had been chosen for Paris-Lyons it presumably would have been necessary to convert the Culoz-Modane section similarly, or to have a considerable stock of dual-voltage locomotives for through workings between Paris, Lyons and the Italian frontier.

Holland had an opportunity to adopt 3,000 V. d.c., had it been desired to do so, in rehabilitating the railways after the recent war, but it was decided to retain the 1,500-V. system as recommended by a commission in 1916. One factor influencing this choice—taken in spite of the adoption of 3,000 V. in Belgium and the operation of international trains between the two countries—was that the points from

which electric power can be taken on the Netherlands Railways are close together. Another reason was the widespread use of multiple-unit trains.

In Belgium, on the other hand, the commission of 1947 recommended standardisation of 3,000 V. d.c. even though this might involve special stock for inter-running over the Netherlands Railways to Amsterdam. The decision was based partly on a study of trends elsewhere, and partly on the grounds of keeping down the capital cost without any material increase in working expenses. Account was taken also of the potential value to Belgian export trade of 3,000-V. d.c. equipment being manufactured in the country.

Some members of the committee visited Italy and Germany, primarily to discuss reports of electrolytic corrosion experienced with the 3,000-V. d.c. system in Italy, but with the secondary purpose of reviewing possible future technical developments with both administrations. The Italian authorities expressed satisfaction with their 3,000-V. electrification and had no intention of experimenting with single-phase a.c. at 50 cycles. In Germany the members inspected the Höllenthalbahn, where 50-cycle a.c. has been used since 1936. Here it was stated that none of the pre-war types of 50-cycle locomotives was thought suitable for more extended use, but trials of modern designs now beginning in France were being watched with interest. Since this section of the report was written, the railway has placed in service an articulated motor coach set and a Bo-Bo locomotive, both of post-war design and equipped with motors operating at the 50-cycle frequency. Experiments with conversion of standard frequency 3-phase a.c. to single-phase of low frequency by means of rectifiers are being continued by the German Federal Railways Administration. Interesting as such possibilities are, their successful realisation seems unlikely to influence traction practice on an international scale considering the extent, as shown in the report, to which countries have committed themselves to d.c. electrification.

Canadian National Railways

THE highest gross revenue in its history and the highest net operating revenue since 1945 were made by the Canadian National Railways last year, according to the annual report for 1950, signed by Mr. Donald Gordon, Chairman & President. Operating revenues totalling $553,831,581 were more than 10 per cent. greater than the previous record of $500,723,386 in 1949. Operating expenses at $493,997,079 showed an increase of nearly $16,000,000 over the previous year, and net operating revenue of $59,834,502 was almost three times that of 1949. After paying taxes, equipment costs, other income charges, and interest on bonds held by the public, a balance of $18,397,614 was left to be applied against Government interest charges totalling $21,658,849, with the result that an income deficit of $3,261,235 was reported. The deficit for 1949 was $42,043,026.

Increased freight traffic and higher freight rates produced the new record in gross system revenues, but the Chairman & President warns that the results should not be regarded as evidence that the financial problems of the Canadian National are on the verge of solution. The heavy burden of fixed interest charges borne by the system and the certain prospect of substantially increased price and wage costs during 1951 had to be considered. The inauguration of the 40-hr. week on June 1 would add greatly to operating costs. Present economic conditions, particularly with regard to the vital importance of the C.N.R. to Canadian security, made it necessary to contemplate extensive capital programmes in coming years to bring the system to a state of readiness in both equipment and facilities.

Despite an almost unprecedented series of interruptions to train service during 1950, 81,364,658 tons of freight, an increase of 5.9 per cent. over the previous year were carried. There were major increases in the movement of coal and coke, timber, ore, and other mine products, newsprint and woodpulp, motorcars and spares, scrap iron, fuel oil and crude oil. A sharp reduction in grain tonnage was chiefly because of the late harvest; pulpwood wagon loadings were below 1949 totals, and a decrease of 11·4 per cent. in "smalls" tonnage was mainly because of the effect of lorry competition. Some of the chief results were:—

	1949	1950
Route-mileage	23,902	24,188
Passenger train-miles	23,740,378	22,387,001
Goods train-miles	43,160,657	45,458,577
	$	$
Goods revenue	394,424,463	445,780,004
Passenger revenue	43,287,240	39,889,206
All other operating revenue	63,011,683	68,162,371
Total operating revenues	500,723,386	553,831,581
Operating expenses	478,501,660	493,997,079
Net operating revenue	22,221,726	59,834,502
Taxes, rents, etc.	18,163,818	17,417,730
Interest on public bonds	24,302,651	24,019,158
Government interest	21,798,283	21,658,849
Deficit	42,043,027	3,261,235

Of the $16,000,000 increase in operating expenses, higher prices accounted for $3,740,000 and higher wage rates for $4,627,000. The total wage bill was $318,208,185. The index of railway material prices showed a rise of 5·4 per cent. during the year to a level twice as high as the average for 1936-8. Had year-end prices been in effect throughout 1950, actual operating expenses would have been greater by a further $6,000,000.

Progress was made in major construction and development projects, including the new Bonaventure freight terminal in Montreal; Mimico Yards, near Toronto; Point St. Charles Shops and Turcot Yards, in Montreal; enlargement of freight yards in Vancouver; and a new freight shed in Edmonton. Work on a further phase of the Montreal Terminal Development Plan began in October, 1950.

Deliveries of new rolling stock included 680 freight wagons, 20 roomette sleepers, 25 air-conditioned coaches, 53 baggage vans, 29 diesel locomotives and 3 electric locomotives. On order at the end of 1950 were 5,140 freight vehicles, 54 baggage vans, 8 mail and parcels vans, 6 sleeping cars, and 88 diesel locomotives. Six multiple-unit motor coaches and 12 multiple-unit trailer coaches are to be delivered in 1951-52. Acquisition of the 29 diesel locomotives brought the total number in service to 177. Operations in Prince Edward Island were completely dieselised during the year. The use of eight road diesel locomotives in freight service between Montreal and the Lake St. John area allowed efficient and economical handling of heavy traffic over difficult gradients.

Experimental runs with diesel locomotives on long-distance passenger trains, and experiments in the better use of fuel in coal-burning locomotives were part of an intensive study being made of motive power needs. Duplex roomette cars, introduced last year for the first time in Canada, have proved popular. Rebuilding and alterations of older coaches is being carried out.

Centralised traffic control was inaugurated on two sections of main line, in Ontario and Michigan, during the year. Automatic block signals were installed on a section in British Columbia. The object is eventual installation of automatic block signals on the main line through mountain territory between Jasper and Port Mann.

Despite substantial additions and improvements in recent years, one-quarter of the freight vehicles, one-half of the coaches, and nearly three-quarters of the locomotives were thirty years of age at the end of 1950. Withdrawals had therefore to proceed at a high rate over the next few years, although material shortages arising out of the defence programme would make deliveries slow and uncertain.

Experience in 1950 made it clear that the existing supply of freight wagons is inadequate for seasonal traffic peaks. Shopping and repair programmes have been accelerated, and terminal and yard delays and turn-round time are being reduced. Freight wagons operated an average of 45·2 wagon-miles per serviceable day, compared with 43·5 in 1949. The serious floods, long periods of extremely cold weather, snow blocks and rock falls in the Rocky Mountains, and a nine-day system-wide strike interrupted services and adversely affected the operating performance. Telecommunications gross revenues increased by 14·2 per cent. to $10,565,625.

XUM

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

Finding the Money

April 3

SIR,—I am surprised at your note on my letter of March 16, published in your March 30 issue. If in your opinion the figures you mention speak for themselves, then I can quite understand how unfortunately placed you are in respect to the comments made on the profitability or otherwise of railway rates on the heavy materials.

Selling prices indices of coal and iron and steel have nothing whatever to do with the profitability or otherwise of railway charges, but may I remind you that if the Minister announces the expected increase of 10 per cent. on railway freight rates, the level of railway rates will exceed the 92 per cent. increase you show for iron and steel.

Yours faithfully,
M. S. BARNARD

Steel House, Tothill Street, S.W.1

March 30

SIR,—On Mr. Barnard's letter in your March 30 issue, surely, with respect, the Editor in his comment baulks the issue.

The point of Mr. Barnard's letter, if I have understood it aright, which I think I have, is that it has always been stated, as far back as I can remember, by the railways that coal and mineral traffics, as far as freight rates are concerned, are subsidised at the expense of the higher class traffics.

Many of us have contended for years that this is patently incorrect. I further suggest that it is provable and the answer is that this contention has never been seriously contested.

Yours faithfully,
H. R. CAULFIELD GILES
Transport & Traffic Manager

Newton Chambers & Co. Ltd.,
Thorncliffe Works, Sheffield

[Our original reference was to uneconomic rates for coal and mineral traffics. Insofar as the increase in the freight rates charged for traffics is less than the advance in the charges borne by the railways for such essential commodities as coal and so forth there is an element of subsidy. The fact that coal and mineral traffic, so far as freight rates are concerned, may be subsidised at the expense of the higher class traffics does not eliminate all element of subsidy in the former. Both the above letters are referred to in an editorial article elsewhere in this issue.—ED., *R.G.*]

Recovery Time in Passenger Schedules

April 2

SIR,—I have read with much interest the article which appeared in your March 9 issue and the letters which you published in your two subsequent issues. I should like to endorse what has already been said, and add some comments of my own.

First, it seems to me that the practice of allowing recovery margins is fundamentally wrong, as it treats symptoms only, and not the disease itself. Prevention is better than cure, and the operating staff should be made to realise that trains should not be allowed to run late, unless something exceptional occurs to cause a delay. The ideal to be aimed at is to keep trains on time all the time.

Main line trains often seem to lose time at or when approaching stations at which they are booked to call *en route*. I have noticed that this is nearly always due to failure to complete the station work in the scheduled time. I could quote many instances of this observed during recent months (not on the Southern Region), and wonder whether station staffs generally realise the disastrous effects on timekeeping which are liable to result as the odd minutes lost at stations react on the running of following trains. On the Southern Region the staff really do "jump to it," and make every effort to get trains away punctually. The timekeeping is excellent (although this is undoubtedly aided to a large extent by electric traction and the Westinghouse brake), and I think the other Regions could learn a lot by studying Southern operating methods, particularly as regards station working.

Nobody has mentioned the effect of the 8-hour day as applied to railway operating staff. I am not very sure of my facts here, and am therefore open to correction, but believe I am right in saying that express passenger locomotives are frequently put away at the sheds after a run by the driver and fireman, if their schedule so permits. If, however, the locomotive arrives late at the sheds, the shed duties have to be carried out by the shed staff and not by the enginemen. A driver and his mate may thus actually book off duty earlier as a result of late running, as they would be working for more than eight hours if they stayed to put away the engine themselves. If this is so, it would appear that some drivers may have an incentive to run late.

Yours faithfully,
DERRICK J. W. BROUGH

135, Mulgrave Road, Cheam

Staff Economies

March 30

SIR,—The editorial article "The Search for Railway Economies" in your March 16 issue mentions the increase in the number of railway employees due to the shorter working week. The cost of providing rest-day relief must be great, bearing in mind that many relief staff cannot be fully employed and have rostered spare days, and that rest-day relief signalmen in particular incur travelling or lodging allowances.

It seems that a much better arrangement would have been to retain the 48-hr. week with its advantages in rostering and grant all affected staff three weeks holiday during the six summer months and a further three weeks holiday during the six winter months, making the total hours worked over a year nearly the same as at present. This arrangement would have many advantages, chiefly elimination of the necessity for recruiting and training staff for summer holiday relief and elimination of redundancy at the end of the summer holidays, which should appeal to the unions.

Yours faithfully,
D. M. RANKIN

Station House, Haverton Hill, Co. Durham

British Railways and the Festival

March 14

SIR,—Within a matter of weeks the Festival of Britain will be opened. What will British Railways be putting on show in this Festival? A few trains with attractive names and schedules and conditions of comfort little better than 20 years ago and with a background of grimy and slow suburban and cross-country trains between stations which retain much of their Victorian antiquity.

Would not overseas visitors and the folks at home be stirred if our railway microphones sounded a pleasanter note instead of those too frequent stentorian injunctions about where our train is. And what about introducing the "mike" into our trains? The air lines have shown the way: our long-distance trains could have a similar amenity—a pleasant-voiced young woman who could enliven a journey not only with advice as to the next stopping place but also with a commentary on the places we will pass.

Festival trains should run from all large centres, and people from these places should be able to have a brief look at the Festival within 24 hr. at a cost of a few shillings. The farthest centre from London is Glasgow, 400 miles. A six-hour schedule would still leave proper

margins for observing all service slacks, and return trains could reach Glasgow at midnight.

Another improvement would be better organisation of porter service at main stations; they should be within call of a kiosk bearing the notice "engage your porter here." As to the botanical enterprise of station staffs, could not healthy rivalry be stimulated to do something on a big scale? If horticultural societies were asked to co-operate by gifts of bulbs and plants, and staff rewarded by prizes, a great display would stimulate and please our people and the overseas visitor with beautiful memories of countryside stations. Let us have more station trolleys dispensing real tea, cleaner aprons and food and have cheerful and willing people on the job. Instead of cell-like rooms, more spacious waiting rooms are needed.

Meanwhile, the Railway Executive, with the co-operation of the railway unions, has issued a call to railwaymen to put their backs into a real effort to lift our railway services on to a more inspiring level. So far so good; but inspiration must come from the upper levels of the management and the Ministry itself if we are to witness a revival of British Railways.

Yours faithfully,

B. NEWTON BROOKS

5, Prospect Vale, Heald Green, Cheshire

Electrification in Britain

April 3

SIR,—The data and arguments in the recently published report [summarised in our March 23 issue] of the Committees of the Railway Executive and London Transport Executive which support its general recommendation of the 1,500-volt d.c. system for future electrification schemes in this country make absorbing reading and powerfully support this conclusion. I would venture, however, to suggest at this time when far-reaching decisions have to be made that at least one main line section should be equipped on the low-frequency single-phase system to provide actual experience of relative advantages and disadvantages of the system on a main line in this country.

But for the 1923 amalgamation such experience would no doubt have been available in the planned extension of the L.B.S.C.R. single-phase system on the main line to Brighton and the electrification from York to Newcastle by the N.E.R. on the 1,500-volt d.c. system. I well remember discussing the matter in 1921 with Mr. Jones, the then Electrical Engineer of the L.S.W.R., who regarded its 600-volt d.c. system as suitable by contrast only for a relatively local suburban area such as it then served.

My reasons for making this suggestion are as follows:—

1. The figures in Table 6 of the Report show that a.c. systems cover a mileage approximately equal to that of 1,500 volt and 3,000 volt d.c. systems in the world. Even allowing for the differences in operating conditions in different countries, this fact would seem to justify an experimental installation to check the estimated costs, or at least an invitation to operating engineers experienced in the single-phase system to prepare an independent opinion on the results to be expected on such a system in the conditions obtaining in this country. It is noted on page 39 of the Report that in the last 20 years most single-phase electrification schemes have been in countries in which this system is already established, but I note from your March 2 issue that it has been decided to electrify the trunk main line in North Island, New Zealand, on this system.

2. An important item in the cost comparison in Table 8 is the cabling of communication circuits in the single-phase system, because of interference. I suggest that (*a*) on routes with a traffic density justifying electrification such cabling is justified independently of the system adopted, on the grounds of maintenance of communication in storms—the cost of the breakdowns on the Southern Region in the storm of last April must have been equivalent to that of many miles of cabling—and (*b*) the cost allowed in the estimates was presumably based on the normal method of carrying the cable on reinforced concrete posts; if the cables were carried on the structures for the overhead wiring, an appreciable saving could no doubt be made, using either stainless steel sheathed self-supporting cables, or lead alloy or aluminium-sheathed cables bound to a catenary wire.

On page 89 of the Report it is noted that it is the practice on the 3,000-volt d.c. system of the Italian State Railways to cable communication and signalling circuits.

3. In the absence of experience of the single-phase system in this country the estimates for this may be less competitive than those for d.c. equipment. In particular, is the allowance, if any, for feeder cables for the a.c. system in line with practice in other countries?

4. The estimates were made before devaluation, but it is stated that the relative costs are not appreciably affected by subsequent market charges. In view of the importance of the increase of the cost of copper in the track equipment and in the substations and track feeders, is this a safe assumption? Nearly all the existing schemes were authorised and carried out when copper was a small fraction of the present price, and the uncertainty of the position in the future would seem to increase the need for an actual comparison in this country between the alternative systems with present-day costs and conditions.

5. The lower efficiency of the motor generator substations of the a.c. system is a factor to be allowed for, but I cannot find any reference in the report to the compensating effect of the reduced losses in the train equipments because of the absence of the starting resistances required on d.c. equipment. This may be allowed for in the cost of electricity.

6. It is proposed to experiment with the 50-cycle a.c. system, of which there is much less experience. If this suggestion were considered, would not the Waterloo-Salisbury and Waterloo-Bournemouth routes be suitable for the purpose, as they are scheduled for ultimate operation by third rail? The local lines to Basingstoke could be equipped with third rail at the start, and up to that point the main lines only with single-phase contact wires. This admittedly involves dual equipment as far as Woking, but on two tracks only. It would have the advantage that if, when the single-phase equipment reached the end of its economic life, it was decided to revert to the third-rail system, the change could be made more easily than to the 1,500-volt d.c. system.

Yours faithfully,

J. R. HARDING

Pirelli-General Cable Works Limited, Southampton

Cooper's Bridge Loadings

March 13

SIR,—In the article entitled "Cooper's Bridge Loadings" in your January 13, 1950, issue, a Cooper's E-50 loading diagram is shown but no special loading appears in the article for any of the loadings. In the 1949 Specifications for Steel Railway Bridges, published by the American Railway Engineering Association, a special E-50 loading is shown which contains two wheels, each weighing 62,500 lb. and spaced 7 ft. apart.

Is a similar special loading used in the British and Indian standard loadings? I would appreciate any information you could give me pertaining to the above matter.

Yours faithfully,

R. BRUCE BEALE

513, Warren Crescent, Norfolk, Virginia, U.S.A.

[In the British Standard Loading Tables is included an alternative loading for longitudinal members up to 10-ft. span, consisting of two unit axle-loads of 1·25 (2,240-lb.) tons spaced 6 ft. apart. It is provided to allow for the additional effect of heavy bogies on these spans, but on longer spans the normal loading train is the criterion. The equivalent of 20 units of British Standard Loading is two axle-loads each of 25 tons, 6 ft. apart. There is no similar alternative loading specified in the Indian Main Line Standard Loadings for either 5 ft. 6 in. or metre gauge. The above are static axle-loadings; and, to assess total loading, accepted allowances for dynamic effects must be added.—ED., *R.G.*]

XUM

THE SCRAP HEAP

Busiest Underground Railway

The Madrid underground railway claims to have the most intense traffic of any line in the world. It carried 326,000,000 passengers over its 16-mile network during 1950. On March 5 last 1,192,000 passengers travelled.

Not the Ticket

When the ticket collector came into the carriage the garrulous snob did not stop talking—he merely handed a ticket to the collector.

"Where are you going, sir?"

"Can't you read?" barked the other. "You've got my ticket, haven't you?"

"I've got a ticket all right, sir," replied the collector, "but it's for a gold watch."—*From "The Link," published by Coras Iompair Eireann.*

Roundabout

The publication of Canon Lloyd's book on railways reminds me of a strange event. Some years ago, the driver and stoker of the express train running from Brussels to Antwerp, normally a journey of less than an hour, were attacked by infectious insanity. The points had to be altered for them all over Belgium, and the signals raised, and they tore from end to end of the country, round and round until the steam was exhausted and the train ran to a standstill. Most of the passengers were removed in hysterics. A friend, who was on board, tells me it was the most exhausting day of sightseeing he has ever known!—*"Atticus" in "The Sunday Times."*

Knowing the Ropes

Two elderly but active ladies settled down in reserved seats after much bustle. The compartment was now full. Another elderly lady came down the corridor. "Here we are, porter. Seat No. 10 Back to engine." The occupant regarded the invader steadily. "I'm sorry, but this is my seat." "I'm afraid it can't be; I have the reservation." The seated lady produced a small piece of paper. "Booked weeks ago at Euston." "So was mine." "Looks like a mistake," said the porter, hovering. "You must find the man in charge." said the seated lady and the porter slid away, never to reappear.

The standing lady remained unhappily in the corridor clutching her piece of paper. "Soon there won't be any seats left." The seated one glanced at her watch. "Five minutes left," she said and got slowly to her feet. "I'll go and find the reservation man." In a few minutes she was back. "Had to walk the whole length of the train!" she panted, "but I found him! He is fixing her up next door." "How splendid of you, Ethel!" said the friend. "Oh, well," said Ethel, as she settled down again, "I've knocked about on this railway for years. I know the ropes."

We all looked at Ethel in wonder, though in our English way we said nothing. She had not, perhaps, mounted a camel and gone swiftly across the desert, shot tiger in India or fished for shark in Australian waters but she had knocked about on British Railways!—*From "Miscellany" in "The Manchester Guardian."*

Ton-Mile Tax on U.S. Lorries

A graduated weight-distance tax on commercial lorries weighing more than nine tons gross will become effective throughout New York State on October 1 of this year.

The new law provides for taxes ranging from 6 to 24 mills (2.4 cents=2d.) per lorry-mile, depending on the gross loaded weight of the vehicle. There are exemptions for *bona fide* farm lorries, Government lorries, breakdown lorries, and for lorries operated exclusively within the corporate limits of a municipality.

Passage of the bill followed publication early last year of the so-called Griffenhagen report, which showed that cars in New York State were then paying, in licence and petrol fees between four and five times as much as heavy lorries.

Just after the bill was enacted, the executive vice-president of a large commercial vehicle manufacturing firm referred to attempts by the railways "to restrict and strangle" lorry transport. Measures for increased taxation of heavy lorries are reported to be under consideration by the States.—*From "Railway Age."*

Marginal Comment

. . . I can recall the days when the London Underground was a sulphureous catacomb, belching through its rare apertures huge parcels of Vesuvian smoke. There were no coaches . . . only little cramped compartments . . . smelling like the inside of an uncleaned chimney. Then came the glittering days of King Edward VII and the excitement of the Twopenny Tube. . . . We were proud of our Twopenny Tube, as proud even as are the Muscovites of their onyx underground. We did not foresee . . . the time when the electric train would slide out among the hawthorns of the Home Counties or plunge below the Thames; we did not foresee that new suburbs, flaunting fine modernist stations, would spring up around this network; we did not foresee escalators, trick lighting, or stainless steel; we did not foresee Mr. Frank Pick. The Underground to me has now become an unfailing source of delight. — *Harold Nicolson in "The Spectator."*

Strayed—One Saloon

There was consternation on the Canadian National Railways in the Kingston, Ontario district, on March 16, when Mr. Donald Gordon, President of the C.N.R., could not find his saloon.

Mr. Gordon arrived in his saloon, *Bonaventure*, for meetings of the Canadian section of the European Economic Rehabilitation Committee. After he detrained the coach was uncoupled from the regular Toronto-Montreal train and removed to be turned round for the return journey.

When he returned later in the afternoon the *Bonaventure* was nowhere to be seen, and C.N.R. employees were just as mystified regarding its whereabouts as was the President. Before the situation grew too serious a despatcher dashed up to explain that the coach had been taken 26 miles away for its turnaround but on the return journey the engine broke down, causing a delay of four hours. The errant saloon came into Kingston just in time for the President's dinner.

Historic Locomotives Preserved

The Railway Executive is to preserve two further examples of historic locomotive types: the Western Region "Star" class 4-6-0 No. 4003, *Lode Star*, and the former L.M.S.R. 2-4-0 No. 20002. The "Star" class, designed by G. J. Churchward, exercised a profound influence on subsequent design and practice, and No. 4003, which is due for withdrawal this year, will be renovated and painted in its original colours and will be preserved at Swindon Works, until a permanent home is found for it. No. 20002 was built at the Derby Works of the Midland Railway in 1866 and is an example of the double-frame style for which Matthew Kirtley was famous. It was withdrawn from traffic in 1947 after covering 1,660,000 miles in its working life of 81 years and has since been stored at Derby, where it will remain for the time being.

Euston, 1951

And, now, I hear that Euston's gloomy portals
Are to become a decorator's dream,
Changing that rendezvous of northbound mortals
Into a fairyland of blue and cream.

I trust no one forgets, in the insistence
On frills and fancies for the famous Hall,
That, somewhere, frowning in the middle distance,
Old Geordie* takes a dim view of it all.

Though Euston shades hold indignation meetings
In vast committee rooms and on the stairs,
The march of time ignores their spectral bleatings—
Modernity has caught them unawares.

Let's leave the painters to their new creation;
What matters, after all, to you and me
Is whether, in this time of transformation,
We still can get a decent cup of tea.

A. B.

* George Stephenson's statue still dominates the Great Hall

OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

INDIA

New Underframe Shops at Ondal

The Government has decided to convert and extend the existing sheds at Ondal, on the East Indian Railway, as a carriage and wagon underframe works at a cost of some Rs. 60-Rs. 70 lakhs (nearly £500,000). This is in keeping with the manufacture of locomotives at Chittaranjan. As carriage and wagon bodies are already built in India, these two new factories will complete the manufacture of all types of rolling stock and spare parts.

MALAYA

Peel Bridge Rebuilt

The Peel Bridge over the Kemubu River in Central Kelantan, which before the war was an essential link between the State and the rest of the peninsula, has been rebuilt and was recently opened by the Sultan of Kelantan.

The first bridge was demolished by floods in 1931, and its successor, constructed to cope with torrents in the monsoon, was destroyed by British forces during the evacuation from Kelantan in 1941.

SOUTH AFRICA

Barrier System

So overcrowded are some suburban trains in rush hour periods that ticket collectors have been finding it impossible to go through the coaches. This, and the fact that many passengers board trains without tickets, has caused a loss of revenue by the Administration of over £100,000 a year. It has now been decided to introduce the barrier system for the collection of tickets at some Reef stations, and at Durban, and Berea Road and other Natal local stations.

A departmental committee that examined the system of ticket collection reported that the number of suburban passengers on the Reef and to and from Pretoria rose from about 40,240,000 in 1940 to nearly 102,845,000 in 1949. The largest increase was in third-class passengers (from 23,598,700 to 66,532,500, or 181 per cent., most of them carried during the peak hours) which resulted in congestion.

The committee states that in normal circumstances corridor collection of tickets is the most effective method of control, but that on the Reef and at other large centres many more examiners would be needed, and they would still have to force their way through overcrowded coaches. The only way to avoid overcrowding would be to run many more trains at peak periods only, but this could not be justified.

The committee believes that barrier control is the only feasible solution and says that this method is in extensive use overseas. The recommendations of the committee have been accepted in principle, and control will be introduced at many stations on the Rand, which handles heavy passenger traffic.

CANADA

P.G.E. Vancouver Extension

As recorded in our March 30 issue, the British Columbia Government is to extend the Pacific Great Eastern Railway from its southern terminus at Squamish to North Vancouver, 42 miles, at a cost of between $8,500,000 and $10,000,000. Work will begin soon, if steel is available and necessary funds can be raised.

Freight to and from Vancouver is at present moved by barge between Vancouver and Squamish, but it is stated that the service is unable to cope with traffic.

The right-of-way of the extension will run through West Vancouver, a fashionable residential district on the north shore of Burrard Inlet, whose residents have set aside a fund to fight the line, which will threaten their amenities. At the same time, North Vancouver, which lies just east of West Vancouver, greatly favours the extension. The southern terminus of the P.G.E. will be situated in that city, to which it will probably bring new industries.

ARGENTINA

Accident on Belgrano Railway

A serious accident occurred on the General Belgrano Railway on March 18, when a seven-coach train hauled by a diesel-electric locomotive and full of returning holidaymakers became derailed on a sharp curve near Thea Station in the Córdoba hills. Six passengers were killed and some 200 injured, several seriously.

FRANCE

Large Coach Orders

The S.N.C.F. ordered 200 all-steel corridor coaches for main line traffic. The contracts are allocated under the 1950 programme. The coaches will have a tare weight of 36 *tonnes*. Lighting is by means of fluorescent tubes. Heating with automatically regulated forced air will be provided by an electric steam-heater battery under one tension for 170 coaches and an electric steam-heater one and four tensions for 10 second class and 20 composite first and second class coaches. The feed-water is supplied by two 95-gal. tanks.

In the second class coaches the number of compartments is reduced to eight, giving a space of 1 ft. 10 in. between seats and room for two hinged table flaps in the first and second class coaches. The second and third class coaches will have two lavatories at each end, one fitted with wash basin only. In the composite first and second class, one of the lavatories will be replaced by a small compartment for the car attendant.

Seating accommodation is 80, third class; 64, second class; and 18 first and 40 second class in the composite coaches. The order comprises 100 third class, 37 second class and 27 composites, all in ordinary steel. To these are added 36 stainless steel coaches which will be built by the Etablissements Carel & Fouché, the builders of the first rubber-tyred train running between Paris and Strasbourg.

New Marshalling Yard

The S.N.C.F. has just completed a new marshalling yard between Dijon and Gevrey-Chambertin on the Dijon-Lyons line, where electrification works are in progress. The new yard, fitted with all the latest improvements, is due to open on May 20. The yard comprises twenty-nine lines. When the extensions are completed the lines will number fifty-six. The yard will then become the second largest in France, marshalling sixty to seventy trains a day, comprising about 3,500 wagons.

WESTERN GERMANY

New Equipment on Höllenthalbahn

Two new 50-cycle traction units have been running on the Höllentalbahn since late November. One is a twin-unit railcar built by Siemens-Schuckert, and the other a Bo-Bo locomotive from the A.E.G. company. Both machines represent the latest trends in 50-cycle design and are equipped with traction motors which operate at that frequency instead of being supplied through rectifiers or rotary converting machinery. Each motor in the locomotive carries two armatures on the same shaft, connected in series, so that there are two commutators and sets of brushgear per driving axle.

The motor coach and locomotive motors are all 12-pole machines. Of the four pre-war 50-cycle locomotives on this line, only the one built by Siemens-Schuckert used a.c. commutator motors, and while being similar to the present A.E.G. machine in having tandem armatures connected in series for each driving axle the number of poles per motor was 28.

Automatic control of acceleration and rheostatic braking is provided in the motor coach by means of a motor-driven camshaft. The locomotive control system comprises a mechanically-operated camshaft which provides 15 main notches, between each of which an intermediate notch can be used momentarily if very fine regulation of tractive effort is required. The rheostatic braking is independent of the line supply, an exciter operated from one of the driving axles being provided for this purpose.

The "Enterprise" Service, Belfast-Dublin-Cork

Steam- and diesel-hauled services of C.I.E. and G.N.R.(I.) requiring speeds of over 70 m.p.h.

WITH the introduction of the "Enterprise" train services the standard of locomotive performance in Ireland has risen to a notably high level. The point-to-point timings over the Great Northern Railway (Ireland) main line between Dublin and Belfast are not so fast as those which followed the introduction of the Glover 3-cylinder compound 4-4-0 engines in 1932, when the best actual running times (excluding standing time at stations) came down to 123 min. northbound and 122 min. southbound, but the intermediate stops made by all the trains at that time permitted the engines to take water. The non-stop runs of the "Enterprise" service, however, require the 3,500 or 4,000 gal. capacity of the G.N.R.(I.) tenders to last out over a run of 112·6 miles, the greatest distance yet scheduled non-stop in Great Britain or Ireland without facilities for picking up water *en route*.

While the steam-hauled "Enterprise" for much of the year is a formation of six bogie vehicles only, when traffic is heavy the load may be increased to a maximum of nine vehicles, with a loaded weight not far short of 300 tons, and then the tax on the locomotives, especially in view of the climbs from both directions to the summit at Adavoyle between Dundalk and Goraghwood, is considerable in relation to water supply.

There are two "Enterprise" workings in each direction daily between Dublin and Belfast, with a uniform timing of 2¼ hr. for the 112·6 miles, requiring an overhaul speed of 50 m.p.h. The steam-hauled trains are the 10.30 a.m. from Belfast and the 5.30 p.m. from Dublin; the opposite turns, at 11 a.m. from Dublin and 4.45 p.m. from Belfast, are worked by a diesel-operated three-car train with buffet accommodation, to which a fourth bogie vehicle may be attached if necessary. The tedious waits of the remaining express trains at Dundalk and Goraghwood for customs formalities are avoided by customs examinations on the platforms at the termini.

Service Extended to Cork

In the autumn of 1950 the steam-hauled "Enterprise" was extended over the main line of Coras Iompair Eireann to Cork, introducing another lengthy non-stop run, over the 110·6 miles between Dublin (Amiens Street) and Limerick Junction. The southbound "Enterprise" reaching Amiens Street at 12.45 p.m., is allowed 45 min. for customs formalities, and then is drawn out and backed into the adjacent platforms of the one-time City of Dublin Junction Railway, for which a further 10 min. is allowed; the advertised departure for the south is thus 1.30 p.m., and the working departure time is at 1.40 p.m. The route then is round the western suburbs of Dublin *via* Glasnevin Junction to Island Bridge Junction, where the C.I.E. main line is joined just outside Kingsbridge terminus. For the 110·6 miles from Amiens Street to Limerick Junction, including the customary setting back into the latter station, the allowance is 135 min., and from Limerick Junction to Cork, 58·5 miles, 68 min. The working time of arrival at Cork is 5.10 p.m., and the advertised time 5.15 p.m.

Northbound, the "Enterprise" leaves Cork at 1.15 p.m. and including the extremely steep climb out of Cork and setting back into Limerick Junction, 76 min. are allowed for 58·5 miles; the train then has a fast timing of 114 min. for the 102·3 miles from leaving Limerick Junction to passing Clondalkin, outside Dublin, and an overall time of 127 min. from Limerick Junction to Amiens Street, 110·6 miles, reached at 4.45 p.m. Passengers here are discharged at the City of Dublin joint platform, after which the train draws out and sets back into the main G.N.R.(I.) station for customs examination, for which 45 min. again are allowed. The overall time from Belfast to Cork is 6¾ hr. southbound and 6½ hr. northbound; if customs examination were possible in the train this could be cut by ¼ hr. in each direction.

TABLE A

GREAT NORTHERN RAILWAY (IRELAND) "ENTERPRISE" EXPRESS, DUBLIN-BELFAST

Three-car diesel buffet unit : weight 106 tons

Dist.		Sched	Actual	Speeds
miles		min.	min. sec.	m.p.h.
0·0	DUBLIN	0	0 00	
1·7	Clontarf		3 46	40
3·7	Raheny		6 55	51
4·8	Howth Junction ...		8 09	60
			p.w.s.	*15
6·7	Portmarnock ...		11 41	
9·0	MALAHIDE ...	13	14 41	57
11·4	Donabate		17 12	57/61½
13·9	Rush & Lusk ...		19 41	54
16·0	*Milepost 16* ...		22 04	52
17·9	Skerries		24 04	70½/67
21·7	Balbriggan		27 21	70½
24·0	Gormanston ...		29 22	70½
27·1	Laytown		32 01	71½
31·7	DROGHEDA ...	35	36 53	*20
—	*Boyne Bridge* ...			*24
37·3	*Kellystown*		45 41	40
41·7	Dunleer		49 57	72½
43·7	Dromin Junction ...		51 40	69/72½
47·2	Castlebellingham ...		54 50	69
52·0	*Milepost 52* ...		59 03	52
54·3	DUNDALK ...	61	61 56	*15
58·0	*Mount Pleasant* ...		67 18	45/39½
62·5	Adavoyle		74 13	39/50
65·5	*Milepost 65½* ...		78 10	42
69·3	Bessbrook		82 00	†64
71·9	GORAGHWOOD...	87	84 56	*50/58½
			p.w.s.	*36
76·9	Poyntzpass		91 38	*40
79·6	Scarva		94 47	*50
82·0	Tanderagee ...		97 19	67
87·7	PORTADOWN ...	105	104 04	*20
88·6	*Seagoe*		105 41	37½
92·7	LURGAN		110 44	59
96·0	*Milepost 96* ...		114 12	56½
98·1	Moira		116 06	69
102·5	Maze		120 08	65
105·0	LISBURN	125	122 40	*47
106·5	Lambeg		124 34	*40
108·5	Dunmurry		127 01	55
110·3	Balmoral		129 01	
112·6	BELFAST	135	132 34	

* Speed restriction
† Maximum speed on Bessbrook bank

Table A gives details of a run from Dublin to Belfast with the northbound diesel-worked "Enterprise." It shows that the 500 b.h.p. of the four diesel engines gives an ample margin for time-keeping. Despite two permanent way relaying checks, the severe permanent slowings over the Boyne Bridge, and through Drogheda, Dundalk, and Portadown, and less severe restrictions at Poyntzpass, Scarva, and Lambeg, the run was completed in 132 min. 34 sec., a gain of 2½ min. on schedule time. From Skerries to Laytown, the unit was maintaining a steady 70 m.p.h. on level track, and up the severe climb from Dundalk, much of it at 1 in 100, with the fourth gear in use (the top gear is the fifth) and full throttle. Driver J. Lowry kept the speed at just below the 40 m.p.h. mark.

The other fairly severe climb is from the Boyne Bridge, crossed at 24 m.p.h., to Kellystown summit—4¼ miles at 1 in 177, on which speed rose to 40 m.p.h. The highest speed of the journey, 72½ m.p.h., was on the descent from Kellystown to Castlebellingham.

The return journey on the 4.45 p.m. service from Belfast, had no special features; point-to-point schedule times were closely observed, and the overall time was 135 min. 17 sec. The diesel working was so well within the power rating that all but the final ¼-mile of the climb from Goraghwood to Adavoyle summit was taken in top gear; not until speed had fallen on the 1 in 100 to 27½ m.p.h. was there a drop into fourth gear, resulting in an acceleration to 29½ m.p.h. at the summit. The riding of the unit is smooth and silent, both through the acceleration periods and at speeds over 70 m.p.h. and the smoothness is assisted by the high standard of G.N.R.(I.) track maintenance.

The first class accommodation is at the outer ends of each three-car set, and offers exceptional comfort; the seats most sought after are those which command an uninterrupted view of the track ahead, or, at the rear end, like an observation car, of the track behind the train. The buffet staff serves refreshments including cooked and cold meals of excellent quality, to passengers where they sit. As previously mentioned, the 500 b.h.p. diesel engines can handle one additional bogie vehicle, attached to the rear of the unit, but pasengers in the latter have no access to the buffet car.

The G.N.R.(I). has twenty similar A.E.C. 250 b.h.p. railcars in service, all assembled in pairs with a corridor trailer between, two pairs with buffet cars and the remainder with corridor third class cars between. The buffet sets run between Dublin and Belfast, each

covering 225 miles daily; six other sets perform other duties, partly in the vicinity of Dublin and Belfast and partly on longer runs, such as Belfast-Londonderry; and the remaining two stand nominally spare at Dundalk, but find ample occupation on stand-by duties and also as relief trains and in carrying special parties. The six sets mentioned above each run from 203 to 308 miles daily, sometimes making 17 individual runs in the day, and with turn-around times at termini as short as 5-7 min. In all the eight sets in regular service cover 2,083 miles weekly, and including other railcars and railbuses the G.N.R.(I.) is now working roughly one-half its passenger services with diesel instead of steam power.

TABLE B

CORAS IOMPAIR EIREANN "ENTERPRISE" EXPRESS

Engine: 3-cylinder 4-6-0 No. 802 *Tailte*
Load: 6 — 178 tons tare, 190 tons gross

Dist.		Sched.	Actual	Speeds
miles		min.	min. sec.	m.p.h.
0·0	CORK	0	0 00	
1·2	*Kilbarry*		5 30	26¼
3·8	*Rathpeacon*		11 31	25½
5·8	Blarney	15	15 13	49½ 54
10·9	Rathduff	22	21 00	52
13·5	*Milepost 151¾* ...		23 53	56½
16·9	Mourne Abbey ...	29	27 26	66
20·8	MALLOW	34	31 43	*30
			p.w.s.	*25
24·2	*Two Pot House* ...		37 19	
25·0	*Milepost 140¼* ...		38 32	49½
28·1	Buttevant	43	41 21	64
33·3	*Ballycaskerry* ...		46 21	57½
36·1	CHARLEVILLE ...	51	49 00	64½ 76½
41·2	Kilmallock	57	53 13	61½ 66
48·3	Knocklong	64	59 58	64
51·8	Emly	68	63 35	
			eased	
58·5	LIMERICK JUNC.	76	+71 52	
7·5	Dundrum	10	9 54	75 72½
11·8	Goolds Cross ...	15	13 35	76½ 79
16·1	*Milepost 90¾* ...		17 03	
			p.w.s.	*33
20·4	THURLES	24	21 58	
			p.w.s.	*23
28·2	Templemore ...	32	31 39	66 69
34·5	Lisduff	39	37 19	64 71½
40·3	BALLYBROPHY ...	46	42 40	*47
41·9	*Milepost 65* ...		44 46	47½
47·5	Mountrath	55	50 06	72½
53·4	*Clonkeen*		56 27	53
56·0	MARYBOROUGH ...	64	59 04	64 70½
65·2	PORTARLINGTON ...	74	67 53	*50
70·3	Monasterevan ...	79	73 13	61
74·5	*Cherryville Junc.* ...		77 47	50
76·9	KILDARE	87	80 28	*50 62½
79·2	*Curragh*		83 11	59
81·4	Newbridge	91	85 03	69 70½
85·9	*Caragh*		88 58	64 66
89·0	Sallins	98	91 58	62 71½
93·8	Straffan	103	96 19	70½
96·9	Hazlehatch ...	106	99 03	
			p.w.s.	*25
100·1	Lucan	110	104 48	55
102·3	Clondalkin	114	107 17	62½
105·4	*Inchicore*		110 31	
106·2	*Island Bridge Junc.*	119	112 28	*20
108·6	*Glasnevin Junc.* ...		117 13	
			p.w.s.	*20
110·6	DUBLIN (AMIENS St.)	127	123 14	

* Speed restriction. † Arrival at platform (after setting back) 74 min. 11 sec. from Cork

Table B is of a typical run of the steam-hauled "Enterprise" from Cork to Dublin. The six-coach trains of G.N.R.(I.) stock which until now have maintained the service, with a tare weight of no more than 178 tons, are light in relation to the size and power of the five 3-cylinder 4-6-0 locomotives of Coras Iompair Eireann which normally haul them. These three engines, introduced in 1939, have three 18½ in. by 28 in. cylinders, 6 ft. 7 in. driving wheels, 1,870 sq. ft. of heating surface, a 28-element superheater with 468 sq. ft. heating surface, and 33·5 sq. ft. firegrate area; the working pressure originally was 225 lb. per sq. in., but has been reduced temporarily to 180 lb. for economy in boiler maintenance. Engine weight is 84 tons, of which 63 tons is available for adhesion; the tenders, larger than those of the G.N.R.(I.), accommodate 8 tons of coal and 5,000 gal. of water; they weigh 51 tons loaded. Engine No. 802, *Tailte*, used on this run, has been fitted experimentally by Mr. O. V. S. Bulleid, Chief Mechanical Engineer, C.I.E., with a single blastpipe and circular chimney as compared with the double blastpipes of the other two engines of this class.

The start from Cork faces the engines with the most severe main line gradient in Ireland, and the effect is made worse by the fact that the first mile from the start is in tunnel. From the platform end this mile of gradient is at 1 in 78-64, followed, after a short level strip, at Kilbarry, by 2 miles at 1 in 60, to Rathpeacon. No. 802, with a gross load of 190 tons behind the tender, emerged from the tunnel at 17 m.p.h., attained 26½ m.p.h. at Kilbarry, and completed the 1 in 60 at 25½ m.p.h.

The ascent continues less steeply; speed rose to 54 beyond Blarney, and fell to 52 up the 1 in 178 to Rathduff, while the summit at milepost 151¾, 13·5 miles out of Cork, was reached in 23 min. 53 sec., at 56½ m.p.h. The descent to Mallow was taken cautiously, and after a severe slowing here, No. 802 accelerated up 4 miles of 1 in 151 gradient to 49½ m.p.h. at the mile-post 140¼ summit. From here the gradients are a series of moderate undulations: the 26·8 miles from milepost 140¼ to Emly were run in 25 min. 3 sec., with a maximum of 76½ between Charleville and Kilmallock. The stop at Limerick Junction (before setting back) was made in 71 min. 52 sec. for the 58·5 miles.

High Sustained Speed

From Limerick Junction a very fast run was made to Dublin. The highest speed of the journey, 79 m.p.h., was touched beyond Goolds Cross, 13½ miles after starting, and between the fairly numerous speed restrictions speeds in excess of 70 m.p.h. were common. The first 16·1 miles from the dead start occupied no more than 17 min. 3 sec.; there were severe permanent way checks before and through Thurles and after Hazlehatch, and the normal service slacks at Ballybrophy, Portarlington and Kildare. Notwithstanding these hindrances, the 89·4 miles from Dundrum to Hazlehatch were run in 90 min. 9 sec., or 87 min. net—an average of over a mile-a-minute—and Inchicore, 105·4 miles from the start, was passed in 110 min. 31 sec., or 104 min. net.

From Island Bridge Junction to Amiens Street is a curved stretch, requiring slow running, and there was further loss by a permanent way relaying check; but Amiens Street was reached in 123 min. 14 sec. from Limerick Junction, 4 min. early. No. 802 had made the run of 110·6 miles in a net time of 115 min., 12 min. less than that scheduled. These runs thus are well within the capacity of the engines, and the locomotive performance ranks with the best in Great Britain to-day. The spotless condition of *Tailte* reflected great credit on all responsible for its maintenance, and the smart appearance of engine and train has no small publicity value.

Dublin-Cork Run

In the reverse direction, with the same engine and load, the schedule proved equally easy. The start from Dublin also is steeply uphill, as after the circuit from Amiens Street to Island Bridge Junction, where a severe speed reduction is needed, a mile at 1 in 84 must be climbed to Inchicore, and 2½ miles at 1 in 100-169 up to Clondalkin. The train left the main station at Amiens Street on time at 1.30 p.m., and was worked so smartly round the adjacent platform that the second start was made at 1·34½ p.m. 5¾ min. early. Clondalkin, 8·3 miles distant, was passed in 17 min. 15 sec. There were severe permanent way slacks at Lucan South, Ballybrophy, and Thurles; the 81·5 miles from Sallins to Dundrum were run in 90 min. 48 sec., slacks included; and the Limerick Junction stop before setting back, 110·7 miles, was reached in 135 min. 18 sec., as booked. From here, Mallow, 37·7 miles, was passed in 40 min. 36 sec., and Cork, 58·4 miles, was reached, after a very slow approach, in 66 min. 41 sec., actually 2½ min. early by the working time, and 7½ min. in advance of the advertised time.

On a very fast run timed recently by Mr. J. Macartney Robbins, engine No. 801 *Macha*, with the same load, attained 70 m.p.h. about 15 miles after leaving Limerick Junction, and continued at over 70 m.p.h. until slowing for Mallow; in descending from milepost 140¼ towards Mallow speed reached 80½ m.p.h., and even up the fairly sharp climbs to Charleville and milepost 140¼ the minimum speeds were 72½ and 69 m.p.h.; 23·0 miles were covered in 18 min. 53 sec., and Mallow, 37·6 miles, was passed in 37 min. 20 sec. from the start.

Another remarkable performance was a speed of no less than 59 m.p.h. attained up the 6½ miles of 1 in 125-140 to milepost 151½ summit, 44·5 miles from Limerick Junction, passed in 45 min. 53 sec. With a restrained descent to Cork, the 58·4 miles from Limerick Junction to Cork were run in 63 min. 20 sec., including the severe speed restriction through Mallow.

The "Enterprise" train, in addition to its value as providing speedy communication between the south and north of Ireland, also offers an attractive means of travelling direct between Southern Ireland and Scotland *via* Belfast, and it is hoped that Transatlantic passengers who have landed from American liners at Cobh, or from Transatlantic planes at Shannon Airport (*via* Limerick Junction), will use the train increasingly for this purpose.

Signalling of Crossing Stations in Pakistan

Power signalling on the Chittagong-Akhaura main line

By H. F. Dennison, M.B.E.,
Signal Engineer, Eastern Bengal Railway

Up home signal, showing loop facing points

THE Eastern Bengal Railway has installed recently at Bhatiyari a single-line crossing station on the Chittagong-Akhaura main line, a system of power signalling believed to be the first of its kind to be introduced in India or Pakistan. It uses standard apparatus, with points operated by hand generator; the signals and points are both controlled from a small relay interlocking panel situated in the stationmaster's office.

The signals are standard unit long-range colour-lights. The interlocking and controls between them and the points are carried out by latched relays with no direct locking, electrical or mechanical, between the key switches on the panel. The system is unique in this part of the world in that the signals are normally dark and approach lighted by the occupation of track circuits carried to a distance of 2,000 ft. in rear of the outer signals. This approach lighting controls the station reception and departure signals for both directions, on the occupation of any portion of the track within the limits of those track circuits, as demarcated by the warning boards (see Fig. 1). The various signal aspects are indicated in Fig. 2 and Fig. 3 and are based on a combination of speed and route signalling, in that the outer signal gives the indication as to whether a train is being received on the straight or is to take a turn out on passing the home signal. Where more than the two routes are concerned, it is proposed to provide some form of indicating apparatus indicating the direction of turn out, either left or right.

Panel Indications

All track circuits, points, and signals are repeated on the illuminated diagram and the control panel; the points are repeated by the standard type illuminated stencil letters, " N " for normal and " R " for reverse. The signal repeater circuits are designed on the " out of correspondence " principle, with the indications above each signal control key switch on the panel. The control cir-

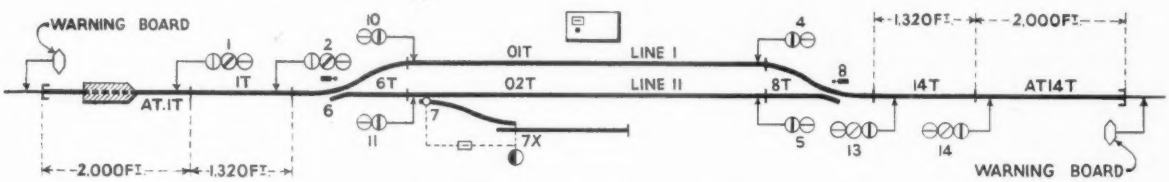


Fig. 1—Train being received on line I

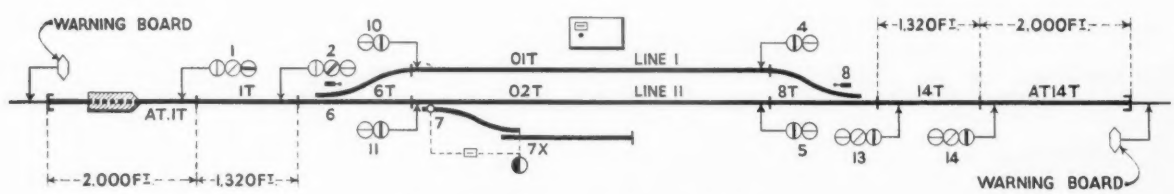


Fig. 2—Train being received on line II

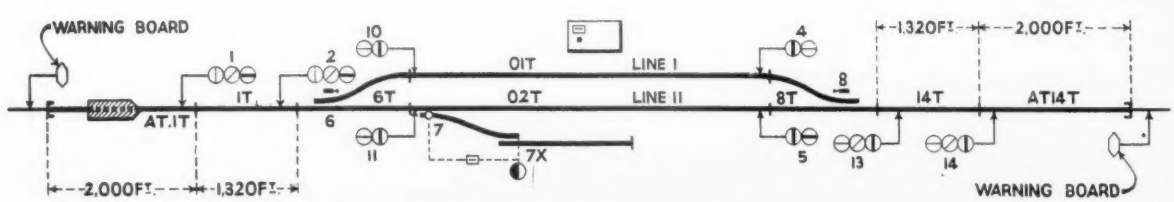


Fig. 3—Train passing through on line II

cuits conform to standard practice and provide for approach and back-locking of functions, where required. They are fed from secondary batteries at 12 volts and the signals are illuminated by 12V.-14 W. lamps from batteries housed in locations adjacent to them. It is proposed to replace the unit type colour-light signals now in use, by the searchlight type with compound lenses, using a 4V.-3W lamp to British Standard Specification 469.

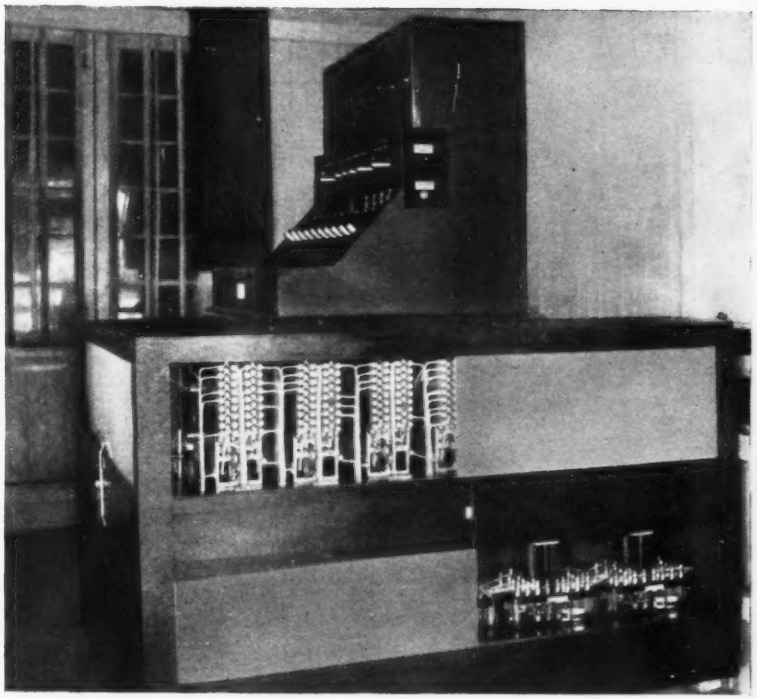
Starting Signal Interlocking

The starting signals are electrically interlocked with the block instruments to ensure that they cannot be cleared unless the corresponding instrument is in the "sending" position. The disengaging circuit on the starting signals has been so arranged to ensure that the "stick" relay remains de-energised until the block instrument handle has been returned to "line closed," which prevents the starting signal from being cleared a second time unless a fresh "line clear" has been obtained. It is proposed to introduce reversible track circuits for block section control in place of block instruments, with direct control on starting signals, to allow train movements by signal indications only and eliminate manual block.

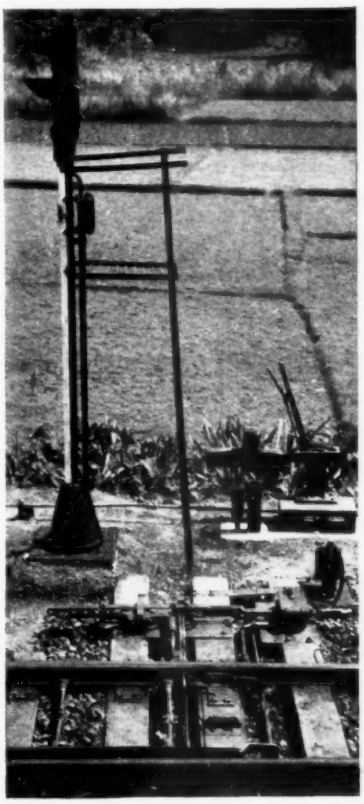
Emergency operation of points is provided in the form of two operating handles, one for use with each point machine in the event of failure and housed normally in a special circuit controller fitted to the hand generator pedestal. The removal of any one of them isolates the operating circuits to the machine concerned in addition to the corresponding signal control circuits.

The control panel is provided with a special stationmaster's isolating key, the removal of which isolates all operating circuits. A push switch is also provided to enable him to test the correct functioning of the signals prior to the occupation of the approach track circuits by a train. The cost of this type of installation compares very favourably with mechanical systems of signalling as applied to stations of this kind, with similar safeguards in the form of track circuiting. It has a definite advantage over other systems from an operating point of view, as "train passing" operations are carried out by the stationmaster on duty, who is solely responsible for all such movements. The saving obtained in operating staff is also a factor worthy of consideration. The system is efficient in operation, offers the required degree of safety and enables wayside stations to be signalled with all the safeguards afforded by a power installation.

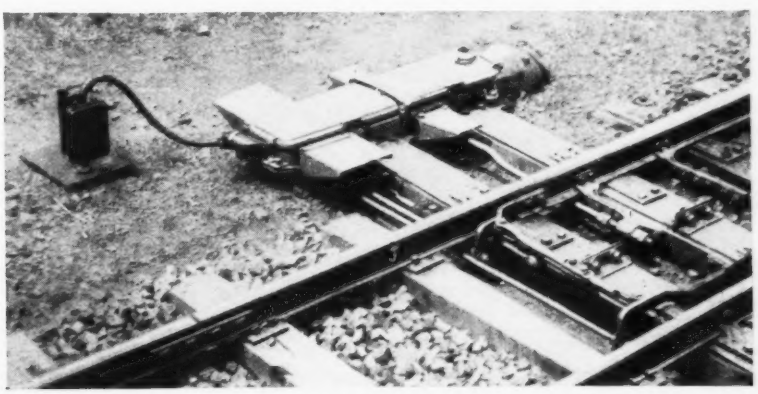
The control panel, illuminated diagram, and relay rack were manufactured locally; the relays, signals and hand generator were supplied by the Siemens and General Electric Railway Signal Co. Ltd., Wembley, and the point machines by the Metropolitan-Vickers G.R.S. Co. Ltd.



Operating panel with diagram, wiring connections, and relays in the stationmaster's room



Down starting signal, with ground frame lever, fitted with electric lock



Facing point layout showing machine connections to point tongues and insulated fittings

Station Sign Improvements at St. Pancras, L.M.R.

Completion of a scheme which makes best use of wall space and improves the station appearance generally

Booking hall at St. Pancras Station after treatment

THE first London terminus wholly to be provided with signs in accordance with British Railways principles is St. Pancras, L.M.R. The work has recently been completed concurrently with the modernisation and improvement of the traffic and commercial advertising equipment. The biggest task was the treatment of the display in the concourse, which work was undertaken in two stages, first, the areas behind the buffer stops and facing the concourse, and, second, the main wall facing the concourse and platforms.

The first step created no difficulties at all. Clear platform number indication was provided, mainly on top of the ticket collecting structures, and the space between the entrances to platforms 2 and 3, and 4 and 5, were fitted with panelled boards designed to display train information and railway publicity.

Before the main wall could be tackled a profusion of direction signs, traffic advertising boards, and commercial advertisements of all shapes and sizes, and displayed on varying alignments, had to be cleared. After this, it was decided to provide a panelled board of 7 ft. 8 in. depth for the length of the wall, corner to corner of the concourse, some 221 ft., except where the carriageway intervened.

The board was divided into spaces for direction signs and commercial advertisements, the position of the spaces being governed by the architectural features above, the site of the train departure indicator, and the entrances to the Hotels Executive café, refreshment room, and grill room below. At the same time the London Transport Executive was requested to replace its existing marker signs, which were fixed high above the two stairways to the Underground lines, by modern signs on suitable sites beneath the bottom line of the new panelled board.

Because of the incidence of buttresses, fall pipes, and cables, the structure had to be suspended from the wall at a maximum distance of 2 ft. to give adequate clearance. Angle-iron brackets and forged fittings were used in fixing. The panelled board is built up in detachable sections each secured by screws to the rear framework of timber; thus, any part of the wall behind the structure is accessible, while the commercial advertisements, some of which contain hand-painted illustrations and figure work, can be removed and repainted in studio or workshop, giving a cleaner finish. In the same way the vitreous enamel direction signs can be detached without difficulty if required.

Available wall space below the new panelled structure is occupied by traffic advertising boards of uniform depth, and on the walls supporting the roof alongside platforms 1, 2, and 7, the traffic and commercial advertising is displayed in two ranges of uniform depth, the traffic boards on platform 7 carrying the station name as a heading. Direction signs on these platforms are suspended, and on platforms 1/2, where there is a group, they are hung in echelon so as to be more easily visible. The photograph reproduced below represents a close-up of the principal direction signs on the panelled board.

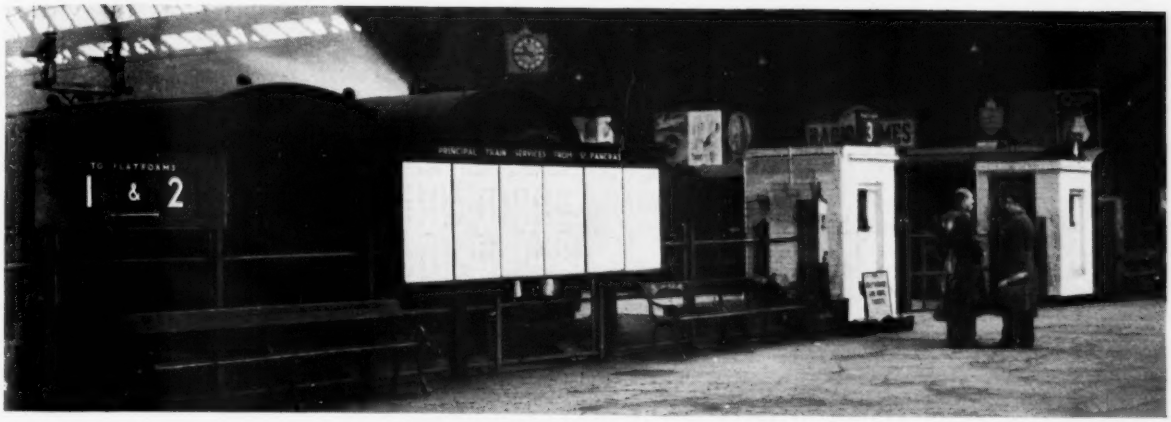
Neon Sign for Main Frontage

The remaining illustrations in this article show the entrance from Pancras Road before and after treatment, and the booking hall. A neon sign has been provided on the main frontage to the station. All the vitreous enamel signs are of maroon with white Gill Sans letters and the neon sign giving a ruby red effect at night.

Four contractors, working to the requirements of Mr. George Dow, Public Relations & Publicity Officer, London Midland Region, were involved in this improvement scheme. The panelled structure and all other traffic and commercial advertising boards were provided and erected by Sturgeon Signs, while all station name and direction enamel plate signs were supplied by Mead McLean & Co. Ltd., and fixed by the Partington Advertising Co. Ltd. The neon sign on the main station frontage was provided and installed by Claude-General Neon Lights Limited.

Main wall facing concourse showing new arrangement of the principal direction signs

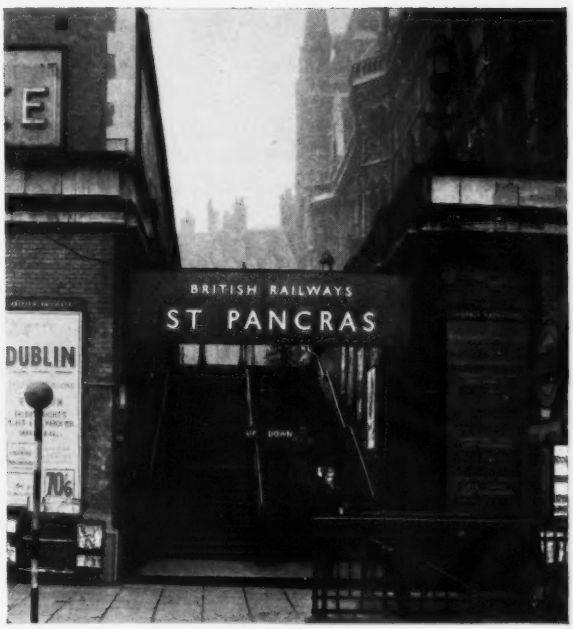
Station Sign Improvements at St. Pancras, L.M.R.



Rear of buffer stops at platforms 1-4 before treatment

New arrangement of information boards at 1-4 platforms

Entrance from Pancras Road before treatment



Entrance from Pancras Road after treatment

Developments at London Transport Acton Works

New plant layout having a planned weekly output on flow-line principles of 250 pairs of wheels

DURING the war the Acton Works of London Transport undertook work for various Government departments and for the services. In consequence, during the whole of the war period, no major expansion or revision of layout of plant for dealing with rolling stock overhaul was possible, so that when the subject was considered in 1946, arrears of expansion had accumulated. Part of the programme of replacement of machine tools and revision of layout then planned is now nearing completion.

With the severity of the Underground service, which necessitates in some cases wheel sets being brought in for reconditioning after as little as 29,000 miles running, it became necessary to reorganise the system of machining wheels and axles and replacement of tyres to ensure a production flow that would attain the output required to deal adequately with approximately 3,800 vehicles on the system.

Features of the New Layout

The most important feature of the new layout is that the wheels are handled on flow-line principles. There are three main flow lines, one for tyre turning, the second for re-tyring, and the third for axle stripping and reassembly.

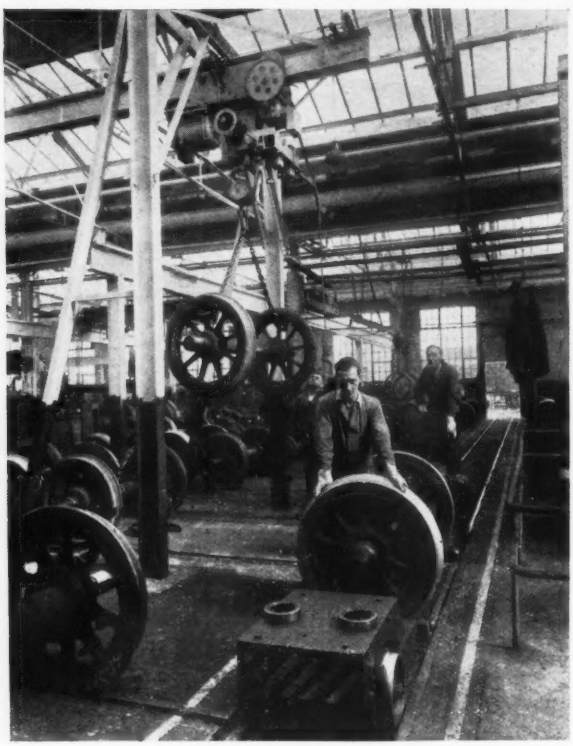
Approximately 85 per cent. of the wheel sets received need the profile of the tyres corrected as a result of wear in service; 25 per cent. of these have tyres which have, as a result of wear and re-profiling on previous occasions, been reduced to a condemning thickness. The remaining 15 per cent. of the wheel sets require axle and suspension journal grinding, replacement of wheel and gear boss wearing plates, overhaul of roller bearing suspension units, or replacement of defective gears of wheel centres.

On arrival in the wheel area, all axle assemblies are inspected and the axles tested with an ultrasonic flaw detector which detects any transverse flaws in the axle. Flaws are found infrequently, but when they do occur, it is under the wheel seat where they cannot be detected by any other means without removing the wheels and gears from the axle. When a flaw is detected on ultrasonic examination, the axle is stripped and placed on a magnetic tester to provide confirmation. If an axle passes the ultrasonic examination the axle assembly is inspected to determine what operations are necessary to make it fit for a further period of service.

In cases where the tyres require re-profiling only, the wheel set is carried on a transporter to one of the six wheel lathes situated on either side of the transporter track. This is the shortest of the three flow lines, the only process being the turning of the tyre profile, after which operation the wheel set is fit for further service.

The wheel sets, with tyres which require replacement due to wear to condemning thickness, proceed on a flow line across the middle of the shop. They first pass to one of two machines for the removal of tyre fixings; one being designed to drill out the rivets which, on older rolling stock, hold the tyre to the wheel centre; the other is in a form of wheel lathe, and cuts away the lip of the tyre allowing the removal, intact, of the retaining ring which is used on the tyres of all the later rolling stock.

The wheel sets then move on to where the tyres are cut through by an oxy-acetylene flame and placed on the tyre removing machine. The machine has two saddles fitted with arms arranged to grip the sides of the tyres. The saddles



Wheel transporter removing a finished turned wheel

A tyre being lowered to an electric induction heater

are moved apart by hydraulic rams which force the tyres off the wheels and carry them clear of the ends of the axle. The tyres are then lifted by pneumatic hoists and placed in stillages for transport to the scrap dump.

New tyres are turned on Webster & Bennett vertical boring machines. Adjacent to these machines are the Oerlikon electric induction heaters in which the temperature is accurately controlled, thus ensuring that the tyre is evenly heated throughout its section.

The heated tyre is placed on a stand and the axle assembly is lowered on to it. The retaining ring is then fitted and the lip of the tyre rolled down under hydraulically applied pressure, on a Massey tyre-rolling machine, so locking the retaining ring in position. Wheel sets with tyres of the older riveted type are placed on a specially designed machine which drills the rivet holes in the tyre, after which they pass to a second machine for the actual riveting operation. The re-tyred wheel set then joins the flow line to the wheel lathes for turning the tyre profiles before it is despatched for service.

Stripping and Reassembly

Wheels and gears are stripped from the axles of 15 per cent. of the wheel sets coming into the wheel area. The stripping and reassembly is done on an outer flow line, the equipment for which includes appropriate lathes and grinders; stripping is done on a duplex hydraulic press of 300 tons capacity.

The lathes for turning axle and suspension journals, wheel and gear sets, are fitted with a rolling attachment providing a pressure of 8,400 lb. on each of three rolls for cold-working of wheel and gear seats, an operation carried out with a view to preventing the formation of fatigue cracks. A Churchill grinder is used for finish grinding axle and suspension journals. Two vertical boring machines are installed in the flow line for boring new gears and wheel centres after which they are transferred to the axle presses for the reassembly of the axles prior to joining the re-tyring flow line.

A Craven wheel-turning lathe equipped with grinding heads

Three oscillating Lumsden grinders are installed in the area for the maintenance of the cutting tools with a view to making the area a self-contained unit. Other sections include an area for whitemetalling axle bearings which are cast on mandrels in the orthodox way; roller bearing boxes, with which all the later rolling stock has been fitted, are also reconditioned in the area. A machine is provided for reamering whitemetal axle bearings and is fitted with a micrometer adjustment, thus reducing to a minimum the amount of hand work in the fitting of the bearings.

The new layout has a planned output of 250 pairs of wheels a week of which, approximately 170 are motored wheels which require work in addition to the simple re-profiling of the tyres. An indication of the severity of service conditions of London Transport railways may be gauged from the fact that, because of the use of roller suspension units on the later stock, of the 17,500 pairs of wheels, only 2,030 are motored wheels requiring whitemetal suspension bearings, while the total production of suspension bearings amounts to more than 6,250 pairs each year, showing an average life of only eight months. It is anticipated that the new wheel area layout will be capable of dealing with the wheel work arising from up to 5,000 vehicles of modern design.

WESTERN REGION FIRST-AID CONTEST.—The results of the Western Region Women's First-Aid Competition, which was held at Old Oak Common Hostel, London, on March 16, were as follow:—

Teams	Marks
Newton Abbot (Florence M. Lean Cup and prizes)	337½
Paddington (Mabel A. Potter Cup and prizes)	293
Swindon "A" (Prizes)	293
Swindon "B"	245
Bristol	234½
Cardiff	210½

Dr. M. M. Scott was the adjudicator in the team test and Dr. P. F. A. Watkins in the individual tests. The subsequent proceedings were presided over by Mr. R. Burgoyne, Regional Staff Officer, and the presentation of trophies and prizes made by Mrs. Burgoyne. The Chairman was supported by Dr. C. T. Newnham, Regional Medical Officer, and Messrs. H. R. Webb, Stores Superintendent; M. G. R. Smith, Assistant Civil Engineer; C. H. T. Morgan, Assistant Engineer (General); and Mr. E. C. Cookson, Assistant Engineer (Permanent Way). The Newton Abbot team will represent the Western Region in the British Railways & London Transport (Railways) Competition for Women to be held by the St. John Ambulance Association at the Central Hall, Westminster, on May 18.

YORK RAILWAY MUSEUM.—Owing to some ambiguity in the wording of the information supplied by the North Eastern Region, which was the basis of the paragraph in the Scrap Heap in our March 9 issue, it was suggested (wrongly, as pointed out by our correspondent in the issue of March 16) that the York Railway Museum was merely a continuation of the 1925 Railway Centenary Exhibition. The North Eastern Region statement, which it was necessary to curtail for reasons of space, was intended to convey that the Museum was a continuation of the 1925 Exhibition so far as concerned the preservation of historic locomotives, and so on, the collection of smaller objects of interest having begun in 1922.

RANSOME & MARLES NEW FACTORY.—After discussions with the Ministry of Supply and the Board of Trade the directors of the Ransome & Marles Bearing Co. Ltd. have agreed to take a lease for 21 years (with an option to purchase) of a new factory to be built at Annfield Plain, near Newcastle-on-Tyne. The cost of equipping the new factory, estimated at £1,000,000, will be provided partly by the issue of the remaining 800,000 shares of 5s. each comprised in the authorised capital and balance out of own resources.

XUM

Palletised Traffic by Road and Rail

(See article on page 418)

Conveyancer fork-lift truck picking up two pallets at a time from a road vehicle before conveying at ground level to goods shed platform

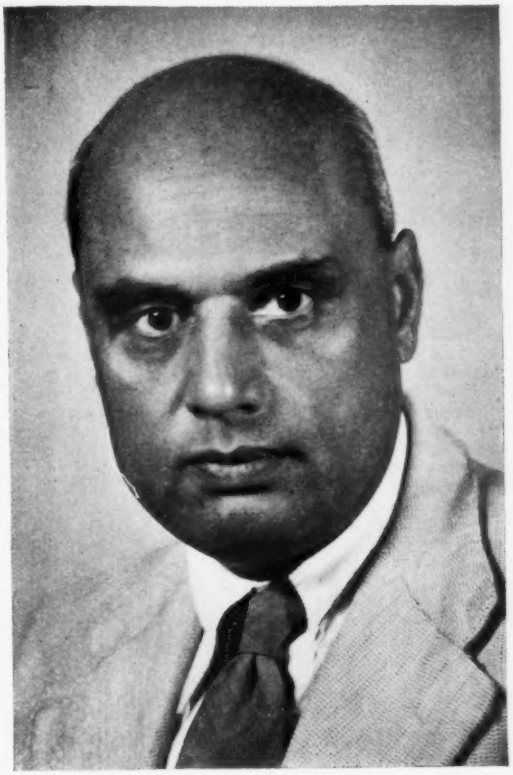
Pallets (two at a time) and (on top) Omicrate filled with parcels being loaded over Lansing Bagnall bridging piece into covered road vehicle by Lansing Bagnall power pallet truck

RAILWAY NEWS SECTION

PERSONAL

Mr. Ramon Magsaysay, Philippine Defence Minister, has been appointed President of the Manila Railroad.

Mr. K. B. Mathur, M.Sc., Chief Operating Superintendent, East Indian Railway, who, as recorded in our March 30 issue, has been appointed General Manager of that Railway, was born in 1904, and was educated at Kanpur and Muir Central College, Allahabad. He graduated as M.Sc. and worked as a Professor of Physics at Ewing Christian College, Allahabad, for two years, before joining the East Indian Railway in 1928, as Probationary Assistant Transportation Superintendent. Following further experience, he served as a senior scale officer in various capacities in the Commercial and Transportation Departments, until 1942, when his services were placed at the disposal of the Defence Department, and he took charge of all rail movements in the Eastern Army Zone. On release from the Defence Department, he returned to the East Indian Railway as Superintendent Transportation, Howrah, and after a brief period as Superintendent, Transportation, Asansol, was promoted in 1946 as Divisional Superintendent (Transportation), Dhanbad. In 1947 he went to headquarters as Deputy Chief Commercial Manager (Goods) and later the same year became Divisional Superintendent, Allahabad; in January, 1948, he was appointed Assistant to Mr. W. A. Mather, President. Mr. Allan C. MacDonald, Executive Assistant to the President, has been granted leave of absence by the C.P.R. to become Director of Shipbuilding in the new Canadian Department of Defence Production.



Mr. K. B. Mathur
Appointed General Manager of the East Indian Railway

Mr. R. A. Saunders-Jacobs
Officiating Chief Engineer, East Indian Railway, who has retired

British Railways, Western Region, has announced that Mr. J. Powell, Assistant to Commercial Superintendent, has been appointed District Goods Superintendent, Paddington.

The Minister of Transport has been informed by the British Transport Commission that it has nominated Mr. D. Murray, Executive Officer (Mineral Traffic), Railway Executive, to the Coastal Shipping Advisory Committee, set up under Section 71 of the Transport Act, 1947, in place of Mr. John Elliot, who has resigned from the Committee following his appointment as Chairman of the Railway Executive.

Mr. R. A. Saunders-Jacobs, B.Sc., M.I.C.E., Officiating Chief Engineer, East Indian Railway, who, as recorded in our March 16 issue, has retired, graduated at University College, London, and later joined the L.N.W.R. as a pupil of Mr. Trench, then Chief Engineer of that Railway. In 1921 Mr. Saunders-Jacobs took up an appointment with the East Indian Railway and worked in various capacities on open line works and maintenance. During the recent war he was Officer Commanding the 138th Indian Railway Construction Company and saw service in the Western Desert, Iraq, and India. Following return from military duty, he was appointed Engineer in Chief (Construction & Surveys) in 1945 and was in charge of extensive railway survey projects in Bihar and in adjoining States. Shortly before retirement Mr. Saunders-Jacobs became Officiating Chief Engineer.

Mr. S. W. Rawson has resigned from the board of Firth Brown Tools Limited.

Institute of Transport

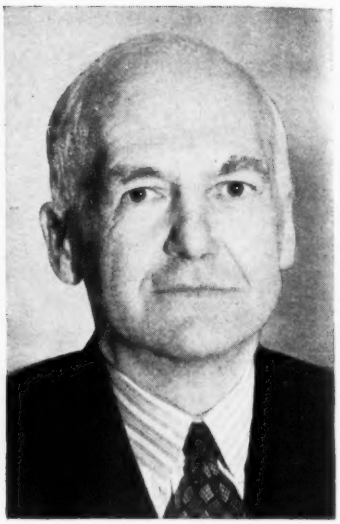
The following have been elected Additional Ordinary Members of the Council of the Institute of Transport: Air Chief Marshal The Honourable Sir Ralph Cochrane, Vice-Chief of the Air Staff; Sir William Currie, Chairman, Peninsular & Oriental Steam Navigation Company; Sir Gilmour Jenkins, Secretary, Ministry of Transport.

Mr. Alistair Fraser

Vice-President, Traffic, Canadian National Railways, 1934-51

Mr. John Pullen

Appointed Vice-President, Traffic, Canadian National Railways



Mr. O. H. Corble

Chief Officer (Marine), Railway Executive, 1948-51

Mr. Alistair Fraser, M.C., K.C. LL.D., LL.B., B.A., Vice-President, Traffic, Canadian National Railways, who, as recorded in our March 23 issue, has retired, was born in New Glasgow, Nova Scotia, and was called to the Bar in 1911 and created King's Counsel in 1921. He served overseas during the war, being awarded the Military Cross at Vimy Ridge, and was appointed an A.D.C. to General Sir Arthur Currie. On demobilisation he joined the Canadian National Railways as General Solicitor, becoming Commission Counsel in 1923, and Assistant General Counsel in 1929. Mr. Fraser was appointed Acting Vice-President, Traffic, in October, 1932, and was confirmed in that position in May, 1934.

Mr. A. F. Keen, Traffic Manager, Manchester Ship Canal, has retired and has been succeeded by Mr. W. G. Edmonds, formerly Deputy Traffic Manager.

British Railways, North Eastern Region, has announced that Dr. C. E. Phillip has been appointed Medical Officer, Leeds.

We regret to record the death on April 8, at the age of 79, of Sir Henry Piggott, C.B., C.B.E., formerly Deputy Traffic Commissioner and Licensing Authority of the Metropolitan Traffic Area.

Mr. C. H. Noton, General Sales Manager, Fibreglass Limited, has joined the board of directors; he will continue to be responsible for sales.

We regret to record the death on April 3, at the age of 79, of Mr. Sidney Wolfe, who founded Wolf Electric Tools Limited in 1900, and was, until his recent resignation, Chairman of the board and Governing Director.

Sir Ronald Matthews has recently been appointed Chairman of the board of Directors of Turton Bros. & Matthews Ltd., and has been succeeded as Vice-Chairman by Mr. A. S. Matthews. Mr. A. J. Spittle, who for 23 years has been Secretary of the company, retires from that position and has been elected to a seat on the board; he is succeeded as Secretary by Mr. E. S. Vickers.

Mr. John Pullen, General Freight Traffic Manager, Canadian National Railways, who, as recorded in our March 23 issue, has been appointed Vice-President, Traffic, graduated with honours in science from McGill University, and entered the freight service of the Grand Trunk Railway in 1913. Three years later he moved into the field of traffic solicitation at Montreal and after service in the first World war became assistant in turn to three Vice-Presidents, the late Mr. J. E. Dalrymple, Mr. A. T. Weldon and the late Mr. R. L. Burnap. From 1932 he was Regional General Freight Agent and later Freight Traffic Manager, being appointed Assistant General Freight Traffic Manager for the system in 1940. Two years later he became Head of the Foreign Freight Department and in 1947 was appointed General Freight Traffic Manager.

LONDON MIDLAND REGION APPOINTMENTS

The following staff changes have been announced by British Railways, London Midland Region:—

Mr. J. Cowing, Assistant Commercial Superintendent (Rates & Charges—Goods), South Woodford, Eastern Region, to be Assistant to Commercial Superintendent (Freight Rates & Charges), Euston.

Mr. S. B. Lovegrove, Assistant District Operating Superintendent, Stratford, Eastern Region, to be District Operating Superintendent, Birmingham (Western).

Mr. C. F. Cade, Chief Surveyor, District Estate Agent's Office, Crewe, to be District Estate Agent, Crewe.

Mr. D. M. Howse, Assistant to District Operating Superintendent, London (Western), to be Assistant District Operating Superintendent, Birmingham (Midland).

Following two appointments to the staff, the Publicity Department of the English Electric Co. Ltd. has been further reorganised. Mr. Peter Scott, who joined the English Electric Co. Ltd. last year, as Manager of the Department, is now joined by Mr. Robert Johnson, as Assistant Publicity Manager, and Mr. Malcolm Logan, as Press Relations Officer. Mr. Scott's Department is responsible for all English Electric publicity, including advertising, exhibitions and press relations. Mr. J. M. Sykes, who has been with the Department for six years, has left the company to devote more time to other business interests. Before joining the English Electric Co. Ltd. Mr. Johnson was Senior Export Representative to Gillette Industries Limited; Mr. Logan was until recently Editor of the *Advertising and Marketing Review*.

Mr. O. H. Corble, Chief Officer (Marine), Railway Executive, who, as recorded in our March 30 issue, has retired, was educated at Bancroft's School, Woodford, and joined the Great Northern Railway in 1908 in the Secretary's Department, in which he became Chief Clerk in 1921, after having served in destroyers in the 1914-18 war with a commission in the R.N.V.R. Shortly after the amalgamation he was transferred to the Chief General Manager's Office, L.N.E.R., and in September, 1924, became Head of the Salaried Staff Section. Mr. Corble was appointed Assistant District Goods Manager, Newcastle, in 1928, and Assistant to Goods Manager, North Eastern Area, in 1929, which position he held until 1932, when he was made Assistant to the Chief General Manager & Industrial Agent. In 1943 he was appointed Assistant General Manager (Ancillary Services), L.N.E.R., in which capacity he had special responsibility for steamships and Continental matters, and was closely concerned with the re-opening of the Harwich routes and the construction of vessels for the Hook-of-Holland and Zeebrugge services. On nationalisation Mr. Corble became Chief Officer (Marine) to the Railway Executive.

Those recently elected Members of the Institution of Mechanical Engineers include Mr. K. S. Robertson, Assistant Carriage & Wagon Outdoor Superintendent (Doncaster), Eastern and North Eastern Regions.

Brookhirst Switchgear Ltd., has announced that Mr. A. B. Hitch has been appointed to the staff of Brookhirst-Igranic (S.A.) Pty. Ltd., the newly-formed company which will promote the interests of Brookhirst Switchgear Ltd., and the Igranic Electric Co., Ltd., in South Africa. Mr. Hitch left for Johannesburg early in March.

Further Increase in Railway Freight Charges

Announcement in House of Commons of 10 per cent. rise in railway, dock and canal charges

The Minister of Transport, Mr. Alfred Barnes, stated on April 9 in the House of Commons that a 10 per cent. increase in railway freight charges, parcels rates, and dock and canal charges of the British Transport Commission would take effect from April 16.

Mr. Barnes, who was replying to questions by Mr. J. A. Boyd-Carpenter and Mr. P. Thorneycroft, said: "In view of the present financial position of the British Transport Commission resulting from recent sharp rises in their costs, I have regarded it as a matter of urgency, in order to assist them in carrying out their financial obligations under the Transport Act, to authorise immediately by regulations under section 82 of the Transport Act such increases in their charges as, having regard to the advice received from the permanent members of the Transport Tribunal, I considered necessary. I received this advice on April 6 and made the necessary regulations forthwith. I have laid the regulations before Parliament as required by the Transport Act.

"Broadly, the regulations authorise an increase of 10 per cent. in the commission's railway freight charges, parcel rates, and dock and canal charges with effect from April 16."

Mr. Barnes then said that he would circulate to Members the advice of the permanent members of the Transport Tribunal, the text of which is given below.

Memorandum for Minister of Transport

"1. By a letter dated March 20, 1951, you asked for our advice on a request by the B.T.C. that it should be authorised under Section 82 of the Transport Act to increase by 10 per cent. (*a*) all the railway charges other than those relating to the conveyance of passengers and their luggage which are regulated by statutory provisions, and (*b*) all the harbours, docks, piers, canals, and inland waterways charges now in operation which are similarly regulated.

"2. In your letter you informed us that you were satisfied that the Commission's supporting memorandum presented an accurate picture of the financial position of the Commission. We have treated this assurance as enabling us to assume that the figures put before us are substantially accurate. Our advice is based on this assumption.

Wages Court of Inquiry

"3. We have considered the information presented to us in conjunction with that disclosed in the course of the extensive inquiry held in January, 1950, and the later statistics set out in the report of the Wages Court of Inquiry held in December, 1950, and January, 1951.

"4. The capital facts are in our view as follows: (1) The accumulated deficit of the Commission's undertaking considered as a whole was at the end of 1950 of the order of £40 million. (2) The accumulated deficit of the British Railways treated as a separate part of the undertaking after debiting its net revenue with an appropriate share of the central charges which have to be met by the Commission was at the same date of the order of £51 million. (3) The additional revenue which it was estimated in 1950 would accrue from the increased charges authorised in May, 1950, and from the London Area Passenger Charges Scheme has been offset by the increased expenditure of the Commission in salaries and wages and on the purchase of coal, petrol, fuel oil, and other materials. (4) At the present level of charges the principal activities of the Commission during 1951 will result in deficits of the order following:—(*a*) British Railways £24 million; (*b*) docks and canals £2½ million; and (*c*) London Transport road and rail services £4 million, the remaining activities producing a credit balance of £5½ million. (5) At the present level of charges accordingly the deficits of the Commission as a whole and of British Railways taken as a separate unit will by the end of 1951 have grown to approximately £65 million and £75 million respectively. (6) During 1950 the British Railways staff decreased by about 19,000. (7) It is estimated that the working expenses (including depreciation and renewals) of British Railways in 1951 will be greater than they were in 1950 by more than £23 million.

Increasing Deficit

"5. It was contended at the inquiry in January, 1950, that as a result of further feasible economies and of a prospective increase in traffic the Commission might, without any increase in charges, be expected to be paying its way by the end of 1952. The conclusions reached by the Consultative Committee were, however, that if charges were not increased the deficits for 1951 and 1952 were not likely to be less than the 1950 deficit (£30 million) that a deficit in the region of £100 million might well have accumulated by the middle or end of 1952, that 'any attempt to liquidate such a deficit through the medium of a charges scheme would . . . be highly detrimental' and that it was 'in the interest of the users of the Commission's services and of the Commission that steps should . . . be taken to secure additional revenue.'

"6. We think that the main question we have to consider is indistinguishable from that which was decided by the Consultative Committee in 1950. We find ourselves forced by the facts and estimates summarised above to conclude that the Commission must be enabled to earn additional revenue.

"7 In reaching their conclusion, the Committee in 1950 were content to accept as an assumption, though they regarded it as optimistic, that the road and rail charges scheme bringing with it whatever benefits could be secured by a full integration of the Commission's services could be brought into operation by the end of 1952. In our view it would now be unsafe to act on any such assumption. It seems to us that even if a freight scheme be lodged in August next, it is unlikely that a complete road and rail charges scheme will be in operation before 1954 at the earliest.

Passenger Fare Increases

"8. It is evident that the great bulk of any additional revenue must be obtained from railway freight charges. The question whether any increase should extend to passenger fares was fully considered by the Consultative Committee in 1950. There are, we think, two reasons which make any discussion of this topic unnecessary at the present moment. The first is that the fares regulated by the London Area Passenger Charges Scheme cannot be altered by regulations made under Section 82 (1). The second is that a general passenger charges scheme is about to be lodged so that passenger fares generally will be the subject of a public investigation in the immediate future. It is obviously undesirable in these circumstances that we should enter upon any discussion of the possibility or expediency of obtaining any increase from this source.

"9. We conclude then, and, in principle, for the reasons given by the Consultative Committee in 1950, that the additional revenue which is in our view urgently necessary must be secured by an increase in railway freight charges and in dock and canal charges. The Commission estimates that the increase of 10 per cent. in these charges now proposed will, after allowing for some loss of traffic, produce in a full year in the case of railway freight traffic about £19½ million and in the case of dock and canal charges about £500,000. If the increase be authorised forthwith the Commission's accumulated deficit at the end of 1951 will be of the order of £51 million. It is, we think, of the utmost importance that such a deficit should not be allowed to grow pending the coming into operation of a complete charges scheme and should indeed be diminished.

Road Haulage Revenue

"10. We are disappointed by the information in the Commission's memorandum about the prospective yield of the road haulage services to the effect that an increase in the net revenue could only be obtained by an increase in charges and that any such increase is impracticable in the face of existing competition.

"11. We cannot emphasise too strongly the necessity of securing every possible economy in such of the operating costs of the Commission as are within their control. Unless indeed substantial economies can be effected the financial position of the Commission on the figures now available will not be stabilised even if the increases under discussion are brought into operation.

"12. For the reasons indicated above, we recommend that regulations be made as soon as possible authorising the British Transport Commission to make the additional charges proposed."

DEVON GENERAL OMNIBUS COMPANY.—The annual general meeting of the Devon General Omnibus & Touring Co. Ltd. was held on March 27. Mr. W. T. James, Chairman, said that during the year the company had operated 10,180,000 miles, which was substantially the same as in the previous year, though traffic receipts were £24,000 lower. This was due partly to the reduced spending power of the public and also to the bad weather and the increased use of private cars. Since last year expenditure had risen sharply and the prices of practically all commodities had been affected. There was still a pronounced upward trend. The major item of increased expenditure in 1950 was the additional tax of 9d. a gal. on petrol and fuel oil. They had now to apply to the Licensing Authority for permission to increase fares generally.

XUM

Palletised Traffic by Road and Rail

Demonstration of loading and stacking equipment at a British Railways goods depot

Equipment manufactured by the Conveyancer Fork Truck Company, Lansing-Bagnall Limited, and Omic Limited was used recently at a demonstration of palletised freight handling at South Lambeth Depot, Western Region. Representatives of the Railway, Road Haulage, and Docks & Inland Waterways Executives were present.

The first item was the loading of some 8½ tons of tins of condensed milk in fibreboard cases, stacked on 40 in. × 40 in. hardwood pallets, into a covered railway goods van by means of a Lansing-Bagnall power pallet truck of 4,500 lb. capacity, which dealt with two loaded pallets at a time, and completely loaded 20 of them in 12 min. The pallet truck was fed from stack, four pallets high, with loaded pallets, two at a time, by Conveyancer battery electric fork truck type E.4/15 (4,000 lb. capacity). A Lansing-Bagnall folding bridge plate was used to bridge the gap between platform and rail vehicle.

Stacking of loaded Omicrates by Conveyancer fork-lift truck

For the second operation the covered goods van was moved away from the platform and discharged, two pallets at a time, to a road vehicle, by means of Conveyancer fork lift truck type G.4/15 (4,000 lb. capacity, petrol driven) assisted by a Lansing-Bagnall power pallet truck. The first pair of pallets was taken from the doorway of the railway van direct by fork truck and placed on the road vehicle. The second pair, partly obscured by the side of the van, were brought to the doorway by means of the side shift mechanism, a feature of this fork truck, and similarly placed over the raves of the road vehicle.

The Lansing-Bagnall power truck was then lifted into the van by fork truck and proceeded to bring each pair of pallets to the doorway for the fork truck to take away and deposit on road vehicle. This operation, involving 7 tons of traffic, took approximately 21 min., but might have been performed more quickly had it been possible to bring the road vehicle nearer to the wagon than 30 yd., which was necessitated by site conditions.

In the third demonstration the road vehicle, loaded with 7 tons of palletised goods, was placed within 12 ft. of the edge of the goods shed platform, and discharged by Conveyancer fork truck, two pallets at a time. The model used in this test was D5-20 of 5,000 lb. capacity, and diesel operated.

From the edge of the platform the loaded pallets were taken, one at a time, by a Lansing-Bagnall Pedestrian electric fork lift truck, model PF15T (1,500 lb. capacity) and re-stacked four-high on the platform. The unloading of the road vehicle took 7 min. and the overall time to completion of stacking, 24 min.

Parcels Handling

The next test demonstrated the ability to deal with miscellaneous parcels traffic by palletised methods. Traffic was discharged from road vehicle to a four-wheel trolley and taken to a series of wire mesh box pallets (Omicrates) where traffic was sorted and placed in the pallets. The loaded Omicrates were then stacked by fork truck, three high, to illustrate how deck space could be saved by making use of available headroom. The Omicrates used were 40 in. × 40 in. × 38 in. high, which appeared to be of sufficient size to accommodate most types of parcels.

The fifth demonstration showed the possibilities of loading 40 in. × 40 in. pallets carrying condensed milk cartons, and 40 in. × 40 in. Omicrates filled with parcels, into covered road vehicle from the platform by means of an Omic hand pallet truck (one pallet at a time) and a Lansing-Bagnall power pallet truck (two pallets at a time).

The final item consisted of discharging palletised traffic from covered railway wagon to a flat road vehicle entirely by means of a Lansing-Bagnall power pallet truck, use being made of a second flat road vehicle as a mobile platform. Lansing-Bagnall bridging plates were used between wagon, mobile platform, and road vehicle. This arrangement minimised the inclination of bridging plates by enabling the descent from wagon to road vehicle to be performed in two stages. Four single loaded pallets were successfully dealt with by this method in 8 min., as previous demonstrations had shown that a pallet truck could completely unload the rail vehicle.

Guiderail Transport System

A demonstration of the Brockhouse Uniline transport system was held at Mayfield on April 6. The guests were received by Mr. J. L. Brockhouse, Chairman & Managing Director, J. Brockhouse & Co. Ltd., the company responsible for the design and construction of the guideway and rolling stock.

The system consists of a single rail laid in the centre of a concrete track some 3 ft. wide, the rolling stock being guided along the rail by means of vertical rollers fitted at the leading and trailing ends of the units; pneumatic tyres are fitted to the locomotive and load-carrying vehicles. The locomotive is driven by a Meadows 90-b.h.p. 4-cylinder diesel engine. The system is designed on somewhat similar lines to that applied to a project installed in the Kathiawar Peninsula, India, which was described and illustrated in our August 29, 1947, issue. During the demonstration the locomotive hauled a load of 21 tons up a gradient of 1 in 15 at a speed of 4·5 m.p.h.

At a luncheon given after the demonstration, Mr. J. L. Brockhouse said that the movement of materials was of vital importance, and efforts were continually being made in all parts of the world to evolve a form of transport suitable for undeveloped areas where it was impossible on financial grounds to justify the installation of normal railways or roads. Immense quantities of mineral deposits lay in areas where the terrain was such that transport problems were extremely difficult, and it was for purposes such as these that the Brockhouse Uniline system of guiderail transport had been developed.

Mr. R. E. Hagley, Executive Engineer, J. Brockhouse & Co. Ltd., emphasised that the system had not been designed to compete with existing road or rail systems, but was intended to supplement those already in existence.

British Railways Tasks and Problems During the Recent Months

Mr. John Elliot's speech to traders at the Mansion House Association on Transport luncheon

The annual luncheon of the Mansion House Association on Transport was held at the Trocadero Restaurant, London, W.1, on April 5. The President, Mr. W. H. Gaunt, was in the chair, and the principal guests were Mr. G. R. Strauss, M.P., the Minister of Supply, and Mr. John Elliot, Chairman of the Railway Executive.

Mr. Gaunt welcomed the principal guests.

Mr. Strauss congratulated Mr. Gaunt on his 21st year as President of the Association, and said he had rendered great service not only to the transport industry but to the nation as a whole.

Referring to the time when he was at the Ministry of Transport, Mr. Strauss said that he had thought then that the Transport Act, 1947, was both necessary and desirable. He still thought so. It was, in his view, a pity that some sections of opinion had thought that it could bring into effect large benefits in a short time. Neither the Minister nor himself had ever held that view.

Filling the rearmament needs of the country must inevitably have its effect on all types of industry, though possibly transport might be less affected than some, such as engineering. It was necessary in a time of full employment to find 650,000 people for the rearmament programme—about 500,000 of them from the engineering industries. The plan would require the goodwill and support of transport and all those who used transport on a large scale.

Difficulties of Movement

Mr. John Elliot said that many of those present were responsible for buying transport in a big way. They were concerned, as were the Railway Executive, as to whether in recent months the movement of traffic had been as good as was desirable. He believed that the buyer should not be concerned primarily with difficulties but with results, but he would like to outline some of the problems the railways had faced.

Three years was a very short time in which to amalgamate four great railway systems. It was a huge organisation. British Railways carried yearly more passengers than the Class I and II railways of the United States. Nowhere in the world was there such density or complexity of railways as in this country.

During the last three years there had been tremendous activity behind the scenes. The Railway Executive had had to do a very big job and, as a comparative newcomer, he could pay tribute to what had been achieved by his predecessor, Sir Eustace Missenden, and his colleagues on the Executive. One of the main causes of the difficulties which had affected the railways had been the tremendous wave of influenza which had swept over the country—the worst epidemic since 1918. This had caused such sickness among railway staff that it had made necessary a number of freight train cancellations, because of the impossibility of finding crews for them. Secondly, the past winter had been marked by appallingly difficult weather conditions which had slowed down movement very badly. Railway transport had to be conducted in the open air and fog, frost and heavy rain had their repercussions, especially, perhaps, in marshalling yards.

There was also a human factor to be considered. This was that, at the present time, the railways were being operated against a background of full employment. Many of the men that the railways would like to have were attracted to other industries where, perhaps, amenities were greater. In certain respects the railways were short of staff. They were certainly not short of wagons, of which more were available than ever before, or of locomotives. The number of wagons and locomotives awaiting repair was less than at any time.

Finally, during the past winter coal had been given a first priority by the railways. It had been considered essential to keep coal moving and not, as had happened sometimes in other years, to leave it for a short while at the pits if to do so suited railway operations better. The needs of industry and the public for coal had been such that the railways had had no option but to keep the coal traffic moving at all costs. Some 3,330,000 tons of coal had been moved each week. The next priority had been accorded to steel, and movements of iron and steel had totalled 220,000 tons a week.

Position Now Better

The position was now much better and it continued to improve. Although there had been a change in the organisation of the railway industry he would like to emphasise that the same people were still dealing with the problems of transport as they arose, and the same skill was being applied today, as had been the case in the past, but the problems themselves were larger and more difficult. There was a great deal of truth in the statement that we were now out of the railway age and into the transport age. As the years went by, the place of the railways in the transport picture would not grow less, but it would be different. For example, the railways were already taking over a lot of parcels traffic which used to be carried on the roads.

Mr. Elliot emphasised that he could see no grounds for pessimism as to the future of the railways or as to the services which they rendered to the trading community. The railways would meet the traders for discussions as to how improvements could be secured next winter. One of the things which the railways hoped would be secured by co-operation was that the production of coal should be kept up during the summer, when it could more easily be moved, and not slacked off and then stepped up again during the winter months.

Organisation under Review

There had been criticism in some quarters of the organisation of British Railways. It had been said that it was overcentralised, and so forth. These difficulties had been exaggerated. A review was now being made of the whole organisation of British Railways. He did not know what changes might be made, but already it had been decided to give more authority to the Chief Regional Officers and the departmental officers.

If the country got through this rearmament programme and escaped a war, great capital sums would have to be put into the railways. It was also necessary to get a basis of real partnership with all ranks of the employees of the railways.

Mr. M. F. Barnard, the Chairman of the Council of the Mansion House Association, after complimenting Mr. Elliot on his speech, said that he would like to suggest that there might be men on the railways who could be trained from the lower grades to be drivers and firemen.

Traders in this country were faced with a problem which was unique in transport history. Under the Act of 1947, transport was being turned into a composite whole and, related to that, a new charges scheme was to be introduced in which the cost factor was to play an important part. The traders did not know how this and all the other factors involved were to be made effective. Naturally they looked forward to the new charges arrangements with some concern.

He asked the transport authorities to realise that, if it had taken them some three years to work out the scheme, necessarily it would take the trading community some months to digest it. He hoped that ample time would be given for consideration of the scheme and that no attempt would be made to rush it through too quickly.

Mr. J. H. Brebner on the Role of the Press

Mr. J. H. Brebner, Chief Public Relations & Publicity Officer, British Transport Commission, addressing Norwegian Editors, the Norwegian Press Association, the Journalists' Club, and the Public Relations Club in Oslo on April 5, described the part played by the Ministry of Information and the British Press generally in 1939-45, and stressed his belief, born of his own experiences as a press officer during the war, in a free press.

He commented on Governmental restriction on newspapers, which was aggravated by the prevailing shortage of newsprint in many countries, and expressed his appreciation of what Scandinavia generally, and Norway in particular, had done to mitigate this at the sacrifice of their own press. By October, 1950, Britain was able to import from Scandinavia newsprint at approximately the same level as pre-war, and imports from Scandinavia in 1951 would continue at roughly the same tonnage. To this vital supply Norway out of an output in 1950 of some 172,000 sent Britain 19,000 tons, which would result in further severe rationing of newsprint for Norwegian papers.

By cutting down on essential newsprint supplies, said Mr. Brebner, the point was reached where there was not enough space to print the news in full enough perspective, with inevitable distortion. If the cuts proceeded circulations had to be reduced, and soon falling revenue from sales and advertising revenue enforced a cut in news services. Soon a stage might be reached where in order to survive, papers had to adopt a conciliatory or even a craven policy in the hopes of thereby safeguarding their future newsprint supplies or even of enlisting financial support, as had happened in other countries. This curtailment of a free press was not necessarily the result of deliberate pressure. More likely, it might happen as a result of a negative and ignorant attitude to the real functions of the press. Newspapers survived circulation wars, sudden shifts in public taste, changes of ownership, the overnight disappearance of editors, and even blitz bombing; but they could never survive further cuts in newsprint (however gradual and delayed these might be) and maintain the service they were giving.

XUM

Associated Electrical Industries Limited

Another year of expanding production: large increase in railway traction orders for export

The annual general meeting of Associated Electrical Industries Limited was held in London on April 3, the Rt. Hon. Oliver Lyttleton, Chairman, presiding.

The year 1950, remarked Mr. Lyttleton, was again one of increased production, although they did not maintain the same rate of increase which had been achieved over the last three years. The figures were affected by the decision of employees at the Trafford Park works of Metropolitan-Vickers to work only on day work and to abandon piecework. Piecework was, however, resumed in February, 1951. The further increase in production in 1950 was achieved without any increase in the numbers at work.

The amount invested in the company by the ordinary stockholders, either by cash subscriptions or by retention of profits, now amounted to £28,000,000, and if they confirmed the final dividend recommended the return on the true capital invested would be about 4¼ per cent. During the five years 1946-50 nearly £19,000,000 had been invested in the business by stock and loan issues or retention of profits.

It was again necessary that stockholders should realise how heavy a burden of taxation the company had to bear. During the three years 1948-50 the company had paid in income tax and profits tax more than £10,000,000, and the ordinary stockholders had received dividends amounting to £3,000,000 before the deduction of income tax, or £1,620,000 net. The figure paid out for wages and salaries for the period was £57,000,000 and included an increase of 17 per cent. in the average earnings. In the current year the company would have paid in taxation more than five times the distributed profits.

From the net profits £1,250,000 had been transferred to general reserve, the same as last year, and the general reserve now stood at £8,250,000. Other reserves had been increased by £120,000 and stood at £2,290,000. Last year they made a transfer from other reserves to general reserve of £1,250,000.

Supplies of Materials

Their principal preoccupation concerned the maintenance of a free flow of raw materials for the manufacturing plants. The difficulties were likely to be serious; at the same time, he must point out that in any rearmament programme the electrical industry must be one of the highest priority, and they had some hopes that these shortages would affect only a small part of their business.

They must, however, expect difficulties in maintaining the production of certain types of lighter electrical appliances. Any falling off was likely to be more than offset by armament orders in the heavier sections. They had planned, as the armament programme advanced, that those factories engaged on such products as domestic appliances should be organised for the manufacture of components for the heavier side.

In these days great importance was rightly attached to British exports and they had been particularly successful in 1950. Orders for the year attained the massive total of £26,000,000 or 38 per cent. of the total orders booked in 1950. A particular feature of their exports had been the large increase in traction orders. Metropolitan-Vickers had booked orders for 48 diesel-electric main-line locomotives for the Western Australian Government, 40 main-line locomotives for the New South Wales Government, and ten locomotives for the Parana Railway, Brazil.

B.T.H. traction orders included ten diesel-electric switching locomotives for the New South Wales Government, 18 for the Western Australian Government, and a large order for 32 1,500 kW. mercury arc rectifiers for the Victorian Railways.

Since a large proportion of all human activity was moving goods from one place to another, the importance of fast and cheap transport was paramount. Railway electrification was a field in which the group had established a leading position. He had already mentioned the important traction orders which the group had obtained in Australia and Brazil. At home the electrification of the Manchester-Sheffield-Wath line was nearing completion. For operation on this line Metropolitan-Vickers were supplying the electrical equipment for 64 locomotives and B.T.H. had developed two electronic loading equipments for absorbing the regenerated power.

The report and accounts were adopted.

Robert Stephenson & Hawthorns Limited

Increasing burden of taxation: steps to meet competition in overseas markets

The annual general meeting of Robert Stephenson & Hawthorns Limited was held on April 6. Brigadier J. Storar, Chairman, presided, and, before dealing with the accounts, referred with regret to the resignation of Mr. F. S. Whalley, who, he said, had guided the affairs of the company so successfully through the many difficulties of the past six years. They were glad, however, that Mr. Whalley had agreed to continue to serve on the board.

Brigadier Storar, in his statement circulated with the report and accounts, said that the burden of taxation, which was now more than one-half the available profit, was indeed heavy, particularly in view of the present high costs of machine tool replacements, building, and building repairs with which they were constantly faced. In the belief of the board, however, it was in the best interests of both stockholders and employees that they continue to follow the policy of ploughing back into the business a substantial proportion of the profits earned, and that wherever possible more productive machines should replace the older and less efficient plant. Plant and machinery acquired up to December, 1938, had now been written off completely, and the only plant and machines now appearing as assets were those acquired after that date.

The importance of keeping the name of the firm constantly before customers and prospective customers overseas was appreciated by the directors, and in the past year he had visited the Argentine, Bolivia, Brazil, Chile, Colombia, Canada, United States of America, and Venezuela. Their Managing Director was at present visiting Australia, New Zealand, and Tasmania, and their overseas representative had visited recently Brazil, Greece, Turkey, East Africa, Egypt, and the Sudan. The company continued to make a substantial contribution to the economy of the country in 1950. Besides supplying many industrial locomotives, stationary boilers, and spares to national industries, and main-line and shunting locomotives to British Railways, their products had been exported to India, South Africa, South America, New Zealand, East Africa, and Turkey.

In addition to the manufacture of steam locomotives, close attention was being paid to the increasing demand for diesel-electric, diesel-mechanical, and electric locomotives. The experience gained through more than a century and a quarter of designing and manufacturing steam locomotives had placed their company in an advantageous position in regard to the design and manufacture of mechanical parts for the later types of motive power. But they were not equipped, nor had they the experience necessary, for the manufacture of compression ignition engines and electrical equipment. In order, then, to enable them to take successfully their place in this field of competition they, together with the Vulcan Foundry Limited, their parent company, had now entered into working agreements with the English Electric Co. Ltd., and also with the Drewry Car Co. Ltd.

The arrangements made would, broadly speaking, enable them to collaborate with the English Electric Co. Ltd. in designing and building the larger types of diesel-electric and electric locomotives, and with the Drewry Car Co. Ltd. in the design and manufacture of diesel-mechanical locomotives and power units up to a maximum of 349 b.h.p.

They had a good order book which should ensure full employment at both works until well into 1953. So far, no undue difficulty had been experienced in obtaining raw materials, and their sub-contracts had been placed well ahead of their requirements. It was, however, reasonable to assume in view of the very unsettled international situation, that difficulties in connection with the supply of materials would arise in the coming year. Every possible effort would be made by all concerned to overcome these.

Although the output from the works during the past year was reasonably satisfactory, there was no doubt that it could be increased considerably at Darlington if more skilled labour was available. There was a shortage of suitable skilled labour in the locomotive building industry. Added to this, there were now more factories in Darlington than could be manned by the labour available in the town, and with the housing shortage it was impossible to attract skilled workers from other areas. This problem was under constant review, but up to the present no satisfactory solution has been found.

They had now entered into a period when they were faced with constantly increasing competition in this country, and from manufacturers in Germany, France, Belgium, and Japan. Although no one in these unsettled days could forecast with certainty what the years ahead would bring, he believed that with hard work backed by the traditional skill of the craftsmen in their pioneer firm, they could face competition and maintain the position they had achieved in the industry.

The report and accounts were adopted.

G.N.R.(I.) Case Restated

Refutation of Parliamentary answer on company's position

A meeting of the committee of the G.N.R.(I.) Stockholders' Protection Association arranged for April 6 had its attention drawn to reports in the daily press of a reply given by the Parliamentary Secretary to the Minister for Industry & Commerce of the Republic of Ireland to a question asked in the Dail as to the position of the company.

According to a statement by the Chairman of the Association, the Parliamentary Secretary's reply, like other pronouncements in recent months by the Governments relating to the affairs of the G.N.R.(I.), needs correction, in conveying that the company approached the Governments to acquire it and that the Governments proposed to do so to oblige the stockholders.

The stockholders had made the position plain. The difficulties forced on their company were due to the Governments' failures to:

Secure for the company the compensation prescribed by the Road & Rail Transport Act, 1935, for the deprivation of its road services in Northern Ireland, or even to restrain the perverting of that statute to the damage of the company.

Act on the White Paper of 1946 in which the Government and not the company decided on the policy of acquisition.

Act on the Government's acceptance in principle of the Milne Report of 1948, which acceptance and not any proposal of the company committed the Government to acquisition.

Act on any of the warnings given from July, 1948, onwards of a crisis in the company's affairs, while exploiting its possession of earned resources to postpone such decisions of policy as had been applied to all the other major undertakings.

Produce the report of the expert advisers whom they appointed in 1949 to make recommendations on the future of the company.

Abide by the principle common to the legislation of both Governments, in their Transport Act, 1950, and Transport Act (Northern Ireland), 1948, that acquisition of the G.N.R.(I.) was to be by agreement.

Agree, in accordance with that principle, even with the company's request for a settlement by arbitration after their "offer" had been made and refused, although the precedents include arbitration allowed to the London Midland & Scottish Railway and available, if they wanted it, to the shareholders in the Dublin United Tramways on its acquisition by C.I.E.

In view of items 2 and 3, it was wrong to suggest that acquisition had now to be proceeded with as if the company was a beggar, for it and each of the Governments had not announced long before that acquisition was its policy. Finding the Governments hesitant in carrying out their own announced policies the stockholders had suggested alternatives: the Governments could either have the company's road powers restored in the North so that it could earn over the whole system the profit attributed to it by the Parliamentary Secretary in the South or, if they regarded the undertaking as a burden to them, enable the stockholders to realise themselves its break-up value.

The Governments preferred to proceed with acquisition, thereby admitting that the G.N.R.(I.) was an indispensable public service. They used as their basis of valuation Stock Exchange quotations, which reflected the losses imposed on the company by all the failures of the Governments, and the stockholders could not brazenly be left to bear those losses. The Governments had even substituted quotations at arbitrary dates for quotations at the dates fixed by the precedents of their own selection, so as to yield the lowest valuation which might be plausible.

The general public was fully aware, as the Parliamentary Secretary ought to be, that the essential cause of the company's present position was the failure not only to secure for it the advantageous terms prescribed for it by law, when its road powers in the North were taken away, but even to prevent the travesty of law by which those road powers were in fact used to the injury of the company.

Staff & Labour Matters

National Arbitration Order, 1305

The Minister of Labour's Joint Consultative Committee has had further discussions on the revocation of Order 1305, which makes arbitration on industrial disputes compulsory and prohibits strikes and lockouts until 21 days after a dispute has been notified to the Minister and appropriate action has not been taken by the Minister to resolve it. A further meeting of the Joint Consultative Committee which includes representatives of the British Employers' Confederation, the nationalised industries, and the T.U.C., is to be arranged by the Minister.

The question of amending the existing order, or substituting a new one, has been raised by the unions and the proposal has also the backing of the T.U.C. whose recommendations include: (*a*) prohibition of strikes and lockouts to be removed from the Order; (*b*) provisions requiring employers to observe recognised terms and conditions to be retained; (*c*) where the normal machinery of negotiation has failed to produce agreement an arbitration tribunal should continue for the settlement of disputes except in industries which have jointly established their own arbitration methods; and (*d*) resort to the proposed tribunal to be voluntary, and deal with those matters (wages and conditions) which are enforceable in the civil courts.

The employers cannot accept these proposals and the discussions were adjourned. It is understood that the Minister has drafted a new Order and after this has been placed before the Committee further discussions will be necessary.

Questions in Parliament

Occupational Level Crossings

Mr. David Renton (Huntingdon—Nat. Lib.-Con.) on March 5 asked the Minister of Transport whether he had yet received the report which in February, 1949, he asked the B.T.C. to submit on occupational level crossings; what steps he proposed to take to bring the legal position of people using such crossings into line with modern practice; and whether he would make a statement.

Mr. Alfred Barnes in a written answer stated: I have received a full and far-reaching report from the B.T.C. The problem is one of very long standing, involving issues of considerable complexity, and, if the recommendations are accepted, legislation will be required to alter the respective rights and obligations of the B.T.C. and highway authorities and others who have an interest in the crossings. This matter requires careful examination, and until this is completed I shall not be in a position to make a statement.

Locomotives for Nigerian Railway

With reference to the report on page 337 of our March 23 issue, of the question and answer given in the House of Commons on March 1 concerning Locomotives supplied by The Vulcan Foundry Limited to the Nigerian Railway, the manufacturers have pointed out that at no time have the purchasers, the Crown Agents for the Colonies, suggested that the trouble experienced with the boilers of these locomotives has been due to either faulty design, workmanship, or materials. A full investigation into the trouble has been carried out on the spot and is now in its concluding stages, and without prejudging official findings it can be confidently asserted that no responsibility attaches to the manufacturers for the trouble which has occurred.

Contracts & Tenders

The Egyptian State Railways has placed an order with A.C.V. Sales Limited for 50 bonneted-type Matador chassis for long-distance haulage.

The London Midland Region of British Railways has recently placed the following contracts:—

Catlin & Co. Ltd., 25, Craven Street, London, W.C.1: additional marshalling and carriage siding accommodation at Willesden Sidings.

W. H. Heywood & Co. Ltd., 54, Victoria Street, Westminster, S.W.1: renewal of the roof covering, with patent glazing, of Saltley Carriage Shed.

Edward Wood & Sons Ltd., 70, Park Street, Derby: renewal of the roof, pits and pavings at Bescot Motive Power Depot.

Robertson Building Service, Wolverhampton Corrugated Iron Co. Ltd., Ellesmere Port, Wirral, Cheshire: R.P.M. V-Beam roof sheeting at Wolverhampton Carriage & Wagon Works.

Topping and Leggatt, 13, Old Park Road, Palmers Green, London, N.13: re-lining of the North Chimney, Stonebridge Park Power Station.

The American Car & Foundry Company has recently received the following orders:—

Atchison, Topeka & Santa Fe Railway: 250 70-ton ballast wagons.

Central Railroad of New Jersey: 500 50-ton box cars.

Delaware, Lackawanna & Western Railroad: 500 50-ton hopper wagons.

Grand Trunk Western Railroad: 250 50-ton box cars; 250 70-ton hopper wagons.

Great Northern Railway: 1,000 70-ton ore wagons.

Southern Pacific: 500 70-ton ballast wagons.

The following contracts have recently been placed by the Canadian National Railways:—

General Motors Diesel Limited, London, Ontario: 12 800-h.p. diesel shunting locomotives.

Montreal Locomotive Works: 12 660-h.p. diesel shunting locomotives.

XUM

Notes and News

Tyres for Carriages and Wagons.—The High Commissioner for Pakistan invites tenders for the supply of tyres for carriages and wagons. See Official Notices on page 423.

Foreman of Works Required.—A foreman of works is required by the Gold Coast Railway for two tours of 18 to 24 months in the first instance. See Official Notices on page 423.

Junior Institution of Engineers.—The annual dinner of the Junior Institution of Engineers will be held at 6.15 for 6.45 p.m. on April 27, at the Connaught Rooms, Great Queen Street, London, W.C.2.

Vacancies with an Insurance Organisation.—An insurance organisation with extensive connections in the transport industry has vacancies on its outdoor staff for a number of young men. See Official Notices on page 423.

Assistant Accountant Required.—An assistant accountant, between 25 and 35 years of age, is required by the Government of Malaya for the railway department for one tour of three years with prospect of permanency. See Official Notices on page 423.

Institution of Civil Engineers.—At a meeting of the Institution of Civil Engineers, Great George Street, London, S.W.1, at 5.30 p.m. on May 1, Messrs. A. E. Reid and F. W. Sully will read a paper on "The Design and Construction of the Baghdad Railway and Road Bridge."

New Station for Gospel Oak.—The London Midland Region of British Railways is to commence work on a £45,000 scheme for the reconstruction of war-damaged Gospel Oak Station. The station entrance will be resited and be provided with a paved forecourt with an ornamental garden and a glass and faience faced station front. The entrance doors will open into a naturally lighted concourse and booking hall with telephone kiosks and booking office. A central ticket barrier will give access to a corridor connecting two new straight staircases to the platforms. The reconstructed platform buildings will be of brick and concrete with wide cantilever concrete awnings covering the new concrete platforms.

The Transportation Club.—Visitors to the United Kingdom during the coming year who are connected with the transport industry will be welcomed at the Transportation Club, 44, Wilton Crescent, S.W.1. Arrangements have been made for them to be accorded short or temporary membership.

Collision at Cannon Street.—The 8.58 a.m. train from Cannon Street to Charing Cross and the 8.22 a.m. Sevenoaks to Cannon Street were involved in a head-on collision outside Cannon Street Station, Southern Region, on April 9. Three passengers were treated for shock at Cannon Street Station and two other passengers and a motorman were taken to hospital with minor injuries.

Steel Output for March.—Steel production in March was at an annual rate of 16,546,000 tons as compared with 17,147,000 tons in March, 1950. Output was affected by the Easter holidays which fell in April last year. Pig-iron output was at the rate of 9,572,000 tons a year as compared with 9,696,000 tons in the corresponding month last year.

Lord Lucas on Nationalised Transport.—At the recent annual dinner of the London centre of the Institute of Traffic Administration, at which Mr. C. R. Griffin, Chairman, presided, Lord Lucas of Chilworth, Parliamentary Secretary, Ministry of Transport, urged transport administrators to use their ingenuity in meeting the problem of rising costs. It was all too easy, he said, to take the easy course of passing these on to the consumer. If transport was properly to serve the national interest it must be taken out of the cockpit of politics. He viewed the transport scene with misgiving, and was appalled, looking at it from the national point of view, that pledges should be made that if there were a change of Government, the tangled skein of nationalisation of transport would be unravelled.

Studying American Markets.—Commerce marketing specialists of E.C.A., whose stand at the B.I.F. last year proved most useful to exhibitors seeking entry to the American market, will again occupy stands this year. Special emphasis will be laid on the necessary follow-through since no sales campaign in the U.S.A. can succeed unless the distributor is alert to competitive developments in the trade.

York Re-signalling: First Stage.—The first stage of the change-over from mechanical to colour-light signalling in connection with the signalling modernisation scheme at York took place between 5 a.m. on April 8 and 5 a.m. on April 9. During the operation, existing points and signals worked from Chaloners Whin and South Points signal boxes at York were disconnected, and the signals put out of use, both signal boxes being dispensed with at the completion of the work on Monday.

British Railways Traffic Apprenticeship Scheme.—On April 11 over 2,620 railwaymen sat for an examination under the British Railways traffic apprenticeship scheme. Successful candidates will be eligible to be interviewed by a selection board for special training with a view to possible appointment to higher administrative and executive posts. While undergoing training they will be known as traffic apprentices. The examinations were open to railwaymen under 28 years of age of all grades, and were held by recognised educational examining bodies at some 70 centres.

Robert Stephenson & Hawthorns Limited.—The report of the directors of Robert Stephenson & Hawthorns Limited for 1950 shows a substantial improvement in the revenue position of the company. The profit for the year was £124,219 before taxation and shows an increase of £41,903 over the previous twelve months. A sum of £67,000 is provided for taxation, leaving a net profit of £57,219, which is £16,000 more than in the previous year. The dividend is to be 10 per cent. The general reserve has been strengthened by the appropriation of a further £35,000 and £5,000 has been allocated to welfare. The balance carried forward is increased this year by £2,094 to £16,700. A report of the annual general meeting appears in other pages this week.

Mr. John Elliot on Team Work.—Mr. John Elliot, Chairman of the Railway Executive, in a message to the staff in the April issue of the *British Railways Magazine*, points out that running the railways is a team job, and if they all pulled in different directions they would get nowhere. If they all pulled together, however,—and there were over 600,000 of them—they would do a better job and be happier men and women. A new Special Joint Committee of representatives of the Railway Executive and the trade unions, whose job it was to further increased efficiency and economy, had its first meeting only ten days after the date of the wage settlement. They must take advantage of the opportunities which this new co-operative effort had given them. Executive officers and trade union officials would do

Presentation to Mr. V. A. M. Robertson

Mr. V. A. M. Robertson, who has retired as Chief Civil Engineer, Southern Region, received a farewell presentation from Mr. C. P. Hopkins, Chief Regional Officer, Southern Region, at Waterloo on March 28. Mr. John Elliot, Chairman, Railway Executive, is looking on

OFFICIAL NOTICES

Crown Agents for the Colonies

ASSISTANT ACCOUNTANT required by the Government of Malaya for the Railway Department on one tour of three years with prospect of permanency. Salary, including expatriation pay, is payable in local currency equivalent at the present Government rate of exchange to £714 a year, rising to £1,078 a year, plus cost-of-living allowance equivalent to from £252 a year for single men and up to £520 a year for married men. Commencing salary according to qualifications and experience. Free passages. Leave on full salary. Candidates between 25 and 35 years of age must have had good training and practical experience in the accounts department of a railway and be fully conversant with goods and coaching audit work. Must be familiar with preparation of revenue and expenditure accounts and returns, preparation and use of statistics. Should have knowledge of mechanical accounting systems, control and stock recording of stores costing as applied to mechanical engineering workshops. Apply at once by letter, stating age, full names in block letters and full particulars of qualifications and experience, and mentioning this paper, to the CROWN AGENTS FOR THE COLONIES, 4, Millbank, London, S.W.1, quoting M.23277E on both letter and envelope. The Crown Agents cannot undertake to acknowledge all applications and will communicate only with applicants selected for further consideration. Staff of British Railways should apply through their local officers.

THE PERUVIAN CORPORATION LTD.—Assistant to Chief of Traction, Peruvian Railways, age 26-30; qualifications: apprenticeship with steam locomotive builders, Higher National Certificate for mechanical engineering, or graduate of Institute of Mechanical Engineers, a knowledge of Spanish an advantage.—Apply to the Secretary of the PERUVIAN CORPORATION LIMITED, 144, Leadenhall Street, London, E.C.3.

WE buy used or unserviceable Steel Files at good prices, in lots of 2 cwts. or more.—THOS. W. WARD LIMITED, R.S. Department, Albion Works, Sheffield.

AN Insurance Organisation with extensive connections in the transport industry has vacancies on its Outdoor Staff for a number of young men. Excellent opportunities to those possessing good personality and anxious to succeed. Write stating age to Box 46, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

SENIOR and Junior Draughtsmen required with experience in the design of diesel-electric locomotives by large manufacturing concern in the Midlands. Men with sound steam and/or electric traction experience will be considered. Experience of bogie design would be an advantage. Please reply particulars of training, experience, salary required to Box 37, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

WANTED for South American Railways—Learners for Traffic Superintendent's Department. Age 20-23 years. Single; some knowledge of Spanish and railway working preferred. Contract three years, renewable. Apply to the Secretary of THE PERUVIAN CORPORATION LIMITED, 144, Leadenhall Street, London, E.C.3.

THE High Commissioner for Pakistan invites tenders for the supply of Tyres for Carriages and Wagons. Forms of tender, which are returnable by May 15, 1951, may be obtained from the Commercial Secretary, Supply & Stores Department, 40, Lowndes Square, London, S.W.1, between the hours of 10 a.m. and 4 p.m. Mondays to Fridays on payment of a fee of 5s. (five shillings) (not returnable) per tender. The reference PR9578/GS should be quoted on all applications for tender forms.

Crown Agents for the Colonies

FOREMAN OF WORKS, Ankobra and Prestea Bridges, required by Gold Coast Railway for two tours of 18-24 months in the first instance. Commencing salary (including overseas pay and temporary cost-of-living allowance) according to age and experience in scale £834 a year, rising to £920 a year. Gratuity of £25 for each period of three months service payable on satisfactory termination. Outfit allowance £60. Free passages. Candidates must have served an apprenticeship as bricklayer/mason or carpenter/joiner and have had at least seven years subsequent experience in their trade, with specialised experience in bridge construction and renewals. They must be able to supervise labour, read plans, make sketches, draw up short reports and generally have an all round knowledge of a Foreman of Works duties. Apply at once by letter, stating age, full names in block letters and full particulars of qualifications and experience, and mentioning this paper, to the CROWN AGENTS FOR THE COLONIES, 4, Millbank, London, S.W.1, quoting M.28523.D on both letter and envelope. The Crown Agents cannot undertake to acknowledge all applications and will communicate only with applicants selected for further consideration.

INTERNATIONAL RAILWAY ASSOCIATIONS. Notes on the work of the various associations concerned with International traffic, principally on the European Continent. 2s. By post 2s. 2d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

RAILWAY MAINTENANCE PROBLEMS. By H. A. Hull (late District Engineer, L.M.S.R.). Valuable information. With much sound advice upon the upkeep of permanent way. Cloth, 8½ in. by 5½ in. 82 pp. Diagrams. 5s. By post 5s. 3d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

their part and success could come if every man and woman in the railway service became imbued with a real sense of co-operation and with an honest desire to get on with the job.

Eastern Region Festival Specials.—To cater for the many visitors coming to London for the Festival of Britain the Eastern Region of British Railways has arranged so far for 135 special trains to be run. These will carry 64,000 passengers, mostly in organised parties.

Record Western Region Sugar Beet Traffic.—No fewer than 240,000 tons of sugar beet were carried by British Railways, Western Region, to factories at Kidderminster and Ailscott during the season which has just closed. This total exceeds the previous record tonnage of 211,000 tons carried in the 1948-49 season.

British Railways West End Offices.—The headquarters of the London Commercial Passenger Service, British Railways, which deals with party travel, special excursions, theatrical, and shipping traffic, moved from Paddington on April 9 to more central accommodation over the newly opened railway ticket office at 22, Charing Cross Road, London, W.C.2. For the convenience of overseas visitors to the Festival of Britain, the British Railways ticket and passenger enquiry office at the "Spread Eagle," Sherwood Street, Piccadilly, London, W.1, is being reopened.

East African Railways Dislocated by Rain.—The main Kenya-Uganda line of the East African Railways has been dislocated by recent deluges of rain which have caused the collapse of embankments. Near Sultan Hamud, an embankment was carried away, and a goods train to Mombasa early on April 7 fell into the breach, killing the driver and injuring the fireman. Subsequently, a collapse occurred near Voi, about 100 miles from Mombasa. A passenger train on the Taveta line joining the Kenya system with the Tanga line in Tanganyika was stranded when the rain weakened a bridge. At one time on the main line and Taveta line there were more than 1,000 passengers stranded in three trains.

Sino-Russian Railway Agreement.—A new agreement between China and the Soviet Union, under which through railway traffic between two countries was inaugurated on April 1, has been signed.

Anglo-American Oil Co. Ltd.: Change of Name.—It is announced by the directors of the Anglo-American Oil Co. Ltd. that the name of the company has now been changed to the Esso Petroleum Co. Ltd.

Cyprus Railwaymen Strike.—Railwaymen in Cyprus declared a 24-hour strike on April 8 in protest against the Government decision to close the railway. The Government announced in November, 1950, that it was considering whether the railway should be abandoned, as it had lost nearly £180,000 in 45 years under Government operation. The Government's final decision was disclosed on April 2.

Effects of Purchase Tax: F.B.I. Representation to the Chancellor.—A Federation of British Industries' letter to the Chancellor of the Exchequer recommends, pending comprehensive examination of the whole question of purchase tax, establishment of an advisory committee. This would hear cases where the tax on certain goods is claimed to be having an injurious effect on an industry or is against the national interest; would initiate enquiries as to anomalies, and suggest remedies; and would advise the Chancellor on measures to ensure that the tax operates with the least harm to trade and industry as a whole and to the export trade in particular.

North British Locomotive Co. Ltd.—The trading profit of the North British Locomotive Co. Ltd. for 1950 amounted to £404,030, including £220,000 final profit ascertained in 1950 on certain contracts carried out in previous years. For the previous year the trading profit was returned at £487,761. After the provision of £75,000 as before for depreciation, and £167,826 against £230,881 for taxation, the net profit comes out at £144,567 as compared with £195,742 last year. The directors propose to place £90,000 (£50,000) to general reserve. After meeting the preference dividend and operating the ordinary dividend at 5 per cent. for the year, £73,119 (£73,552) will be carried forward.

Scottish Region Special Trains for Wembley.—Twenty-six special trains have been laid on from various stations in Scotland to London in connection with the England v. Scotland match at Wembley on April 14. Of these trains 17 are being run *via* Carlisle and nine will pass through Berwick. The majority of the specials will leave for London tonight, Friday, and return tomorrow evening.

Deep-Water Berth at Dar-es-Salaam.—An agreement has been signed between the British and the Belgian Governments for the construction of a deep-water berth at Dar-es-Salaam, Tanganyika, for Belgian use. The berth is in addition to the two deep-water berths under development at Dar-es-Salaam for the East African Railways & Harbours Administration. It will be built at Belgian expense. The work on all three berths, which will be carried out by J. L. Kier & Co. Ltd., of London, will begin soon and take three-and-a-half years to complete.

British Oxygen Company Results.—On the ordinary capital as increased by the issue of 693,820 shares of £1 each last year, the board of the British Oxygen Co. Ltd. recommends a final dividend of 12 per cent.—the same as for the previous year on the smaller capital—which makes 20 per cent. for 1950, as last year. Group trading profit for 1950 amounted to £3,013,364, or £715,966 more than for 1949, after charging depreciation of £1,212,220, against £966,624. United Kingdom and oversea taxation absorbs £1,712,167 (£1,290,673), and the group net profit coming out at £1,301,197, as compared with £1,006,725 for the preceding year. After deducting the amount attributable to out-

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side shareholders of subsidiaries, the profit available to members of the parent company was returned at £1,134,998, showing an increase on the year of £79,951.

New Pakistan Railway Proposed.—An agency message states that the Pakistan Government is considering the construction of a light railway between Karachi and Ormara. Surveys are expected to begin soon. The projected railway is expected to open up the rich mineral deposits in the Lasbela, Kharan, and Makran areas.

Edgar Allen Exhibits at Castle Bromwich.—The exhibit arranged by Edgar Allen & Co. Ltd. at the B.I.F. will include steel castings, small tools, permanent magnets, special tool steels, axlebox liners, and so on. Examples of railway castings will include a pair of automatic coupler castings and a body casting for rolling stock slack adjustor equipment. The trackwork department will show two specimen axleboxes lined with manganese-steel liners and a small quantity of these liners of various shapes and sizes.

Plastics Exhibition in London.—The firm of Thomas De La Rue & Co. Ltd. will be holding an exhibition from July 2-19 at the galleries of the Royal Society of Painters in Water Colours, Conduit Street, London, W.1, and this will be the first time that products representative of all the activities of the company in security printing, stationery, plastics, and the gas industry have been brought together under one roof. Exhibits of historical interest will tell the story of the development of the firm from early Victorian times and among the articles shown will be several which were on display at the Great Exhibition of 1851. Admission to the exhibition will be by invitation.

Forthcoming Meetings

April 14 (*Sat.*).—Permanent Way Institution, Manchester & Liverpool Section, at Southport. "Relaying in Woodhead Tunnel," by Mr. H. Wilton.

April 17 (*Tue.*).—Institute of Transport, informal luncheon, at the Connaught Rooms, Great Queen Street, London, W.C.2, at 12.30 for 1 p.m. Speaker: Mr. S. W. Nelson, Licensing Authority for the Northern Area.

April 18 (*Wed.*).—Institution of Locomotive Engineers, at the Institution of Mechanical Engineers, Storey's Gate, St. James's Park, London, S.W.1, at 5.30 p.m. "Practice and Trend in Development of Diesel Engines with Particular Reference to Traction," by Mr. G. Jendrassik.

April 18 (*Wed.*).—Permanent Way Institution London Section, at Denison House, Vauxhall Bridge Road, S.W.1, at 6.30 p.m. Presidential address by Colonel H. B. Everard, Chief Officer Engineering (Maintenance), Railway Executive, on "Modern Trends in Permanent Way," followed by a film.

April 19 (*Thu.*).—Diesel Engine Users' Association, annual luncheon, at the Connaught Rooms, Great Queen Street, London, W.C.1, at 12.30 for 1 p.m. Principal guest: Mr. T. A. Crowe, Chief Engineer, John Brown & Co. Ltd.

April 21 (*Sat.*).—Irish Railway Record Society, visit to Clara-Banagher Branch, Coras Iompair Eireann.

Railway Stock Market

Removal of Budget uncertainties has given markets an opportunity to assess the outlook, and, generally, business is expected to increase, although buying is likely to be largely selective. Many industrial shares still give good yields and there would have to be a sharp fall in earnings to endanger the rate of dividend payments. Shortages of materials and rising costs will, naturally, cut earnings in many cases, but there are many companies prominent in either rearmament work or the export trade with good prospects of expanding output or turnover. There are conflicting views regarding the near-term outlook for equity or ordinary shares and fixed-interest securities. Some brokers contend that with inflation in evidence it seems that over a period, equity share values must participate in any further general rise in prices, bearing in mind that the value of plant and machinery of most companies is now materially more in terms of £ s. d. than a year ago.

Foreign rails may attract buyers in some cases because current market prices are below expected pay-out levels, and in others, because of prospects of improved results. Antofagasta preference stock at 50½ offers a generous yield on the basis of the 5 per cent. annual dividend, and, moreover, there are dividend arrears outstanding. Antofagasta ordinary stock has remained around 7¼ at the time of writing. Renewed demand was reported for Manila bonds, and the "A" bonds strengthened again to 76 on the view that, although the pay-out for these bonds is probably still a long way ahead, holders who retain may receive back considerably more than the present market price. Leopoldina stocks were more active on renewed hopes that news of the date of the pay-out will be forthcoming before long. The ordinary stock firmed up to 10⅞, and the preference to 27½, while the 4 per cent. debentures were 95 and the 6½ per cent. debentures 142. Leopoldina Terminal 5 per cent. debentures were 95 and the ordinary units 1s. 3d.

United of Havana stocks had a steadier appearance with the 1906 debentures at 17½. Nitrate Rails shares were 23s. 9d. and Taltal 16s. 6d. San Paulo 10s. units have been dealt in around 14s. 9d. and Great Western of Brazil were 162s. Bolivar "C" debentures were 57 and La Guaira ordinary stock 84½. Canadian Pacifics continued active and changed hands over 53¼ on hopes that the application to make higher freight charges will be granted. The preference stock and debentures were 75 and 100½ respectively. White Pass Yukon 6 per cent. debentures changed hands around 88.

Road transport shares generally held steady with Southdown at 97s. 6d., Lancashire Transport 55s., and West Riding 25s., while Devon General 7 per cent. preference marked 23s. 6d. At the time of writing, B.E.T. deferred stock has strengthened to £515.

Engineering and kindred shares tended to attract more attention and in many cases engineering shares still offer quite generous yields. Guest Keen have remained active around 55s. 3d. awaiting the financial results which may give news of the decision whether there is to be a return of capital or some other form of special payment. Thornycroft strengthened to slightly over £5, and Cammell-Laird and Vickers both remained active, although best levels were not held. Vickers is expected to make its dividend announcement next week. The market is assuming that there will be an additional distribution of some kind for shareholders in Cammell-Laird and Vickers arising from compensation for English Steel, but the greater part of this compensation will probably be retained.

Locomotive building and kindred shares, after easing, were inclined to strengthen on hopes that the Anglo-Argentine talks will lead to a solution to the problem of releasing the earnings of British companies now "frozen" in the Argentine.

Hurst Nelson were 57s., and Birmingham Railway Carriage were steady at 35s. 6d. on the full report and annual statement, while Beyer Peacock were 31s. 1½d. and North British Locomotive 19s. 3d. Charles Roberts were 101s. 6d., Wagon Repairs 5s. units 15s. 9d., and Vulcan Foundry 28s. 6d.

Traffic Table of Overseas and Foreign Railways

	Railway	Miles open	Week ended	Traffics for week: Total this year	Traffics for week: Inc. or dec. compared with 1948/49	No. of weeks	Aggregate traffics to date: Total 1949/50	Aggregate traffics to date: Increase or decrease
South & Central America	Antofagasta ...	811	30.3.51	£ 137,450	+ £ 89,710	13	£ 1,227 860	+ £ 405 930
	Costa Rica ...	281	Feb., 1951	c1,039,485	+ c354,453	35	c8,375 739	+ c1,770 937
	Dorada	70	Jan., 1951	41 557	+ 3.460	4	41,557	+ 3 460
	Inter. Ctl. Amer. ...	794	Feb., 1951	$1,233 459	+ $51 829	8	$2,548 803	+ $80 536
	La Guaira	22¾	Sept., 1950	$68,726	— $39,529	39	$725,535	— $241,943
	Nitrate	382	15.8.50	10,816	— 8,656	32	286,336	+ 6,203
	Paraguay Cent. ...	274	30.3.51	£182 579	+ £21 688	39	£7,921 814	+ £2 319 039
	Peru Corp. ...	1,050	Mar., 1951	$7,903 000	+ $711,300	39	$68 671 000	+ $15 273 942
	" (Bolivian Section)	66	Mar., 1951	Bs.14.210,000	+ Bs.8,601.500	39	Bs. 110.467,000	+ Bs.23,120 336
	Salvador	100	Feb., 1951	c244,000	+ c5,000	35	c1,327.000	+ c27,000
	Taltal	154	Feb., 1951	$1,734,098	+ $427,696	35	$12,596,791	+ $2,153,180
Canada	Canadian National†	23,473	Feb., 1951	14.451.000	+ 2 199,000	8	30,086,000	+ 6 151,000
	Canadian Pacific† ...	17,037	Feb., 1951	10,318.000	+ 1,517,000	8	21,234,000	+ 4,251,000
Various	Barsi Light* ...	167	Feb., 1951	31,627	+ 8,325	48	317,595	— 6,645
	Egyptian Delta ...	607	10.10.50	18,245	+ 1,296	28	319,911	— 24,005
	Gold Coast ...	536	Jan., 1951	309.279	+ 176,104	44	2,574 365	+ 260.269
	Mid. of W. Australia	277	Jan., 1951	41 990	+ 7.585	31	277,213	+ 65,652
	Nigeria	1,900	Jan., 1950	502,360	+ 38 978	44	5,017,814	+ 266,573
	South Africa ...	13,347	17.3.51	1,833 025	+ 457.031	50	86,236,684	+ 12 390,750
	Victoria	4,744	Dec., 1950	1,299,615	— 566,411	26	—	—

* Receipts are calculated at 1s. 6d. to the rupee † Calculated at $3 to £1